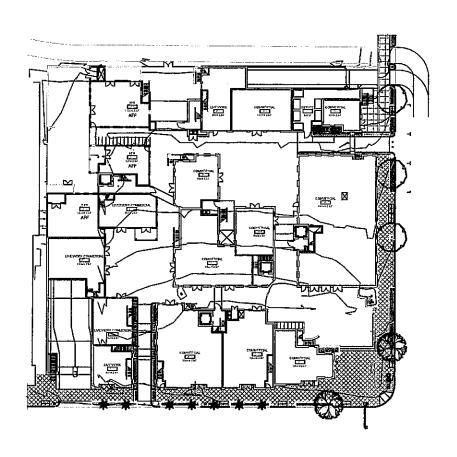
RADIO SQUARE PRELIMINARY ACOUSTICAL STUDY Santa Barbara, California







October 25, 2006

transportation planning • traffic engineering acoustical engineering • parking studies

Mr. Steve Delson DBN CARRILLO, LLC 27032 Rocking Horse Lane Laguna Hills, CA 92653

Subject: Radio Square Preliminary Acoustical Study (Revised)

Dear Mr. Delson:

RK ENGINEERING GROUP, INC. (RK) is pleased to provide the attached preliminary acoustical study for the Radio Square project located northwest corner of Carrillo Street and De La Vina Street, in the City of Santa Barbara. This study has been prepared in response to City requirements for new developments and should be sufficient to obtain acoustical approval of the proposed project.

The attached study indicates that the proposed use is compatible with the site from a noise standpoint if the recommended noise mitigation measures are implemented. For exterior noise control, this will include noise control barriers (walls) at some units; interior noise control will require "windows closed" conditions, and potentially upgraded windows to attain the required interior noise reductions. With these design features, the project will meet the required noise standards as specified by the City of Santa Barbara.

The findings in this study are preliminary. A final noise study will need to be prepared prior to obtaining building permits for the project. That study will be utilized to finalize exterior noise requirements based upon precise grading plans and identify any additional mitigation measures that might be required to meet the City of Santa Barbara interior noise standards based upon building design and construction information.

RK is pleased to have assisted DBN on the Radio Square project and looks forward to working with you again in the future.

If you have any questions regarding this study, or would like further review, please do not hesitate to call Mike at (949) 474-0809 extension 208.

Sincerely,

RK ENGINEERING GROUP, INC.

Mike Rosa

Senior Acoustical/Transportation Planner

Attachments

RK:MR:rd/RK5071.doc JN:1512-06-08 ert Kahn, P.E.

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3991 macarthur boulevard, suite 310 newport beach, california 92660 tel 949.474.0809 fax 949.474.0902 http://www.rkengineer.com

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RADIO SQUARE PROJECT PRELIMINARY ACOUSTICAL STUDY (REVISED) City of Santa Barbara, California

Prepared for:

DBN CARRILLO, LLC 27032 Rocking Horse Lane Laguna Hills, CA 92653

Prepared by:

RK ENGINEERING GROUP, INC. 3991 MacArthur Boulevard, Suite 310 Newport Beach, CA 92660

> Mike Rosa Robert Kahn, P.E.



October 25, 2006

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1.0 Executive Summary

A preliminary acoustical analysis and design has been completed to determine noise exposure and necessary mitigation measures for the proposed Radio Square project, which is located on the northwest corner of De La Vina Street and Carrillo Street, in the City of Santa Barbara (see Exhibit A). The results of this analysis indicate that future motor vehicle noise emanating from Carrillo Street and De La Vina Street, in addition to point source noise on two sides of the project will represent the principal source of community noise that will impact the site. The aforementioned noise impacts can be adequately mitigated with appropriate noise control measures.

Current City of Santa Barbara noise standards require that exterior noise levels be maintained at or below 60 dBA Ldn; a stringent standard when compared to the typical California exterior noise standard of 65 dBA that is used by the vast majority of cities and counties.

The results of this study indicate that at some locations the projected exterior noise levels, in worst-case scenarios, will exceed the City of Santa Barbara exterior noise standard of 60 dBA Ldn for residential uses. To reduce noise exposure to exterior living areas of the residential development, noise control barriers will be required for some units.

It is expected that the City of Santa Barbara interior noise exposure standard of 45 dBA Ldn for residential uses will also be exceeded at some units. However, the standard should be met using "windows closed" conditions and potentially upgraded building shell construction (i.e., better insulated windows). Final verification of these requirements will be based upon the final noise study, which will need to be completed prior to obtaining building permits.

A detailed list of necessary noise control measures is presented in the Summary of Mitigation Requirements section of this study, in Tables 1 and 2, and on Exhibits C-1 through C-4. The

noise control analysis and recommendations in this study are intended to satisfy City of Santa Barbara's Conditions of Approval, with respect to tentative tract maps. A report prepared by this acoustical Consultant that verifies interior and environmental noise levels are mitigated sufficiently to comply with the City of Santa General Plan Barbara Noise Element shall be submitted prior to issuance of a building permit.

2.0 Summary of Mitigation Requirements

2.1 Exterior Area Noise Exposure Control

The City of Santa Barbara noise standards for residential development require that outdoor living areas have an Ldn no greater than 60 dBA; as mentioned previously this standard is considered rather severe when compared to the typical 65 dBA that is allowed by most other cities and counties in the State of California. The findings of this study indicate that maximum future unmitigated noise impacts to this site exceed the 60 dBA Ldn exposure limit for some of the residential dwelling units.

To meet the City of Santa Barbara exterior noise standard of 60 dBA Ldn, noise barriers are required for some units that are adjacent to the aforementioned noise sources. Tables 1 and 2, and Exhibits C-1 through C-4 indicate the height and location of the individual noise control barriers necessary for the Radio Square project.

The data in Tables 1 and 2 is based upon barrier locations at the balcony boundary line of the subject units; it is important to note that the barriers' attenuation will be accomplished only if the referenced minimum height is based from the unit's finished floor elevation. Where applicable, the barriers should wrap around the ends of the balcony to prevent flanking of noise into the site. Required barrier heights and locations are detailed on Tables 1 and 2, and graphically illustrated on Exhibits C-1 and C-4.

2.2 Noise Control Barrier Construction Materials

The designed noise screening will only be accomplished if the barrier's weight is at least 3.5 pounds per square foot of face area with no decorative cutouts or line-of-sight openings between the shielded areas and roadways. The recommended noise

control barrier may be constructed using one or any combination of the following materials:

- 1. Masonry block;
- 2. Stucco veneer over wood framing (or foam core), or 1-inch thick tongue and groove wood of sufficient weight per square foot;
- 3. Glass (1/4-inch thick), or other transparent material with sufficient weight per square foot.

The recommended barrier must present a solid face from top to bottom. Unnecessary openings or decorative cutouts should not be made. All gaps (except for weep holes) should be filled with grout or caulking.

2.3 Interior Area Noise Exposure Control

Typical California residential building construction will provide a minimum of 12 dBA noise reduction under a "windows open" condition and a minimum of 20 dBA noise reduction under a "windows closed" condition. To obtain an interior noise level of 45 dBA Ldn, some of the dwellings adjacent to the noise sources will require "windows closed" conditions.

2.4 Unit Ventilation

Based upon this preliminary study, it is expected that the interior 45 dBA Ldn residential intrusion limit will be exceeded at some units when the operable door and window are open. Therefore, the "windows closed" condition is applicable to these units in order to meet the interior noise standard. These units are indicated on Exhibits C-1 through C-4. Attic vents facing adjacent roadways should include an acoustical baffle, or the attic floor (including the access panel) should be fully

insulated to prevent vehicle noise intrusion. Exhibit D shows a typical attic vent acoustical baffle detail.

2.5 Building Shell Design

It is expected that the interior noise exposure standard at some units in the project will only be met by using a "windows closed" condition. For proper acoustical performance, all exterior windows, doors, and sliding glass doors, in units requiring the "windows closed" condition, must have a positive seal and leaks/cracks must be kept to a minimum.

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3.0 Introduction

This study presents the results of a preliminary acoustical impact and design study for the proposed project located on the northwest corner of Carrillo Street and De La Vina Street, in the City of Santa Barbara. Included is a discussion of the expected exterior community noise environment, recommendations for control of the noise impacts to outdoor areas, as well as interior noise exposure analysis and control. A final acoustical study will address the ultimate requirements needed to meet the interior noise standards necessary to obtain building permits.

In the following sections, noise exposures expected within the planned site are reviewed and compared to the applicable noise standards. Design recommendations necessitated by the noise standards have been presented in the Summary of Mitigation Requirements section of this study.

3.1 Noise Standards

The current City of Santa Barbara Noise Element of the General Plan includes guidelines for community noise impacts for different land uses. The project's land uses are considered "noise sensitive land uses" for which City of Santa Barbara's standards limit exterior noise levels to 60 dBA Ldn in outdoor living areas and interior noise levels to 45 dBA Ldn in all habitable rooms.

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4.0 Exterior Area Noise Environmental Analysis

Exhibit B shows the location of the proposed project in relation to the subject roadways. It is expected that the primary source of noise impacts to the site will be traffic noise emanating from Carrillo Street and De La Vina Street. In addition, there are two point-sources of stationary noise that will affect the project; the first is a Ralph's loading dock and mechanical equipment located on the east side of De La Vina Street, across from the project. The second source of stationary noise is a HVAC unit mounted on the roof of a Sav-On that is adjacent to the west side of the project; both can be adequately mitigated against. Other roadways (including the SR-101 Freeway that is located approximately 1,500 feet from the project site) are not expected to contribute to the noise impacts for this project due to their distance, lower volume/speed, and/or shielding by building structures between the site and these streets. It is expected that railroad noise will make no contribution to the development's noise environment.

The expected future roadway noise impacts were projected using a version of the Federal Highway Administration (FHWA) Traffic Noise Prediction Model (FHWA-RD-77-108), together with several key roadway and site parameters. Key inputs include roadway classification, roadway active width (the distance between the center of the outer most travel lanes on each side of the roadway); buildout roadway volumes (year 2030); travel speed; percentages of automobiles, medium trucks and heavy trucks in the roadway volume; roadway grade; angle of view; site conditions ("hard" or "soft"); and percent of total average daily traffic (ADT) which flows each hour throughout a 24-hour period.

Based upon information from various sources (refer to Table 4 footnotes for specifics), Carrillo Street will have a year 2030 ADT 35,400 that travels at a speed of 30 mile per hour; De La Vina Street will have a year 2030 ADT of 13,300 that travels at a speed of 25 miles per hour. A summary of the roadway and site parameter values used to project maximum future roadway noise impacts to the Radio Square project is presented in Table 4.

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5.0 Exterior Area Noise Exposure Analysis and Control

The City of Santa Barbara standards for residential land use require that noise exposures in all usable outdoor areas not exceed 60 dBA Ldn. Analysis of and recommendations for control of motor vehicle and point source noise impacts to outdoor living areas are presented in this section.

As mentioned previously in this study, there are multiple sources of noise within the project site, and with four floors of living/retail spaces that include balconies that face different directions, mitigation is difficult to sum up; hence Tables 1 and 2 and Exhibits C-1 through C-4. These tables and exhibits clearly indicate the locations and heights of the required barriers. It is important to note that for clarification the exhibits do not indicate the recommended mitigation to reduce noise levels from the adjacent HVAC unit on the roofof the Sav-On; Table 2 includes a separate and complete listing of all balconies affected by the HVAC noise impacts and the results the various mitigation methods would have (with the exception of relocating the HVAC unit). The owner of the Sav-On building has indicated that he will assist in mitigating the HVAC unit noise, since it is an issue with his own building. The aforementioned methods range from constructing barriers at the balconies only, constructing barriers around the HVAC unit only, and a combination of both (the combination being the best of the three shown). A fourth method has been examined and deemed to be the best overall, that is to move the HVAC unit to a less exposed area of the Sav-On building's roof. Projected impacts were not figured for this method due to the many variables involved; however, it is the highest recommended option as it holds the most promise for results based on distance. Using the relocation method some balcony barriers would still likely have to be constructed, but the required heights would be significantly reduced. In addition, DBN has met with the current Sav-On owners and the owners are in favor of supporting the options listed above. If the relocation method is selected, noise impacts can be calculated to determine the best location. Once the required barriers are constructed it is expected that the residential outdoor useable space's noise-exposure levels will be less than the 60 dBA Ldn limit.

5.1 Construction Noise

Noise impacts from construction activities of the proposed project are a function of the noise generated by construction equipment, the equipment location, the sensitivity of nearby land uses, and the timing and duration of the noise-generating activities. Construction activity for the proposed project was examined in three distinct phases. Each phase can be characterized by the following operations: (1) clearing/excavation, (2) building foundation, and (3) building construction. The Environmental Protection Agency (EPA) has compiled data regarding the noise generating characteristics of specific types of construction equipment. Noise levels from the sources decrease with distance from the construction site at a rate of approximately 6 dBA per doubling of distance. Noise levels in the immediate vicinity of the construction area would increase during proposed project construction activities. Short-term noise impacts associated with grading and construction activities could result in noise levels ranging between 76 dBA to 100 dBA measured 50 feet from the noise source. These noise levels would exceed the short-term 60 dBA CNEL threshold and should therefore be considered a potentially significant impact, however, they can be mitigated based upon the various techniques mentioned later in this report.

Demolition activities, clearing, grading, hauling, framing, and completion of the building construction on-site would create short-term noise increases over 60 dBA perceived by sensitive noise receptors located within 1,600 feet of the project parcel. Noise sensitive receptors including residential units north of the project site would potentially perceive short-term noise increases when: (1) construction vehicles would enter and leave the site (with workers, building materials, or construction equipment); (2) activities would occur in construction staging areas; (3) during operation of

temporary on-site generators; (4) grading activities occur; and (5) during building construction. The intensity of potential noise impacts would depend upon the proximity of the noise receiver to the area under construction, the number and type of construction equipment operating each day, and the length of time each piece of equipment would be in use. Impacts on noise would be temporary, but potentially significant.

Noise barriers will need to be defined (type and place) or the mitigation contained in the report should be changed to require a noise barrier (or some other name) plan to be prepared by the noise consultant that verifies that construction noise levels are reduced to the most reasonable extent possible and said plan is to be submitted prior to issuance of a building permit for verification by the City. The following preliminary measures have been identified and would minimize the short-term potential construction noise impacts from the project upon adjacent land uses:

- 1. Construction activity for site preparation and for future development shall be limited to the hours of 7:00 a.m. to 8:00 p.m., Monday through Friday. No construction shall occur on City Holidays. Construction equipment maintenance shall be limited to the same hours. Non-noise generating construction activities (e.g., painting, landscaping with hand tools, etc.) are not subject to these restrictions.
- 2. Stationary construction equipment that generates noise that exceeds 60 dBA at the project boundaries shall be shielded with the most modern and effective noise control devices (i.e., mufflers, lagging, and/or motor enclosures). All equipment shall be properly maintained to ensure that no additional noise, due to worn or improperly maintained parts, would be generated.

- 3. The project applicants shall notify the sensitive noise receptors two weeks to one month in advance of any and all construction activities. The construction manager's (or representative's) telephone number shall also be provided with the notification so that community concerns can be communicated.
- 4. Stockpiling and vehicle staging areas shall be located as far as practical from sensitive noise receptors. Every effort shall be made to create the greatest distance between noise sources and sensitive receptors during construction activities.
- 5. The project shall comply with Section 9.16.015 of the noise section of the City's Municipal Code.
- 6. A report prepared by the Acoustical Consultant that verifies construction noise levels are reduced to the most reasonable extent possible shall be submitted prior to issuance of a building permit.

6.0 Interior Area Noise Exposure Analysis and Control

Interior noise exposure is the difference between the projected exterior dBA Ldn exposure at the structure's facade and the noise reduction provided by the structure itself. Typical building construction will provide an approximate 12 dBA noise reduction with "windows open" and a minimum 20 dBA noise reduction with "windows closed".

An analysis has been made of the anticipated conservative interior noise levels within the project site. The results of this analysis indicate that the interior noise levels will range from 51.9 to 61.0 dBA Ldn with "windows open" and 43.9 to 53 dBA Ldn with "windows closed". Table 3 provides a summary of the interior noise impacts and necessary reductions. To obtain interior noise levels of 45 dBA Ldn, as required by the City of Santa Barbara, some units adjacent to the subject noise sources will require the "windows closed" condition.

Non-specific noise reduction calculations for the Radio Square project were used to estimate "windows closed" conditions at selected units. When the final acoustical study is performed, in depth interior noise reduction calculations will be determined based on detailed floor and elevation plans for accurate and specific expected interior noise levels.

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7.0 Conclusions

A preliminary acoustical analysis has been completed for the proposed Radio Square project. This analysis indicates that the future noise environment is expected to be dominated by vehicle noise emanating from Carrillo Street and De La Vina Street, in addition to noise emanating from the nearby Ralph's and adjacent Sav-On. The noise control findings show that the 60 dBA Ldn residential outdoor exposure noise limit is expected to be met with the construction any one of the noise control mitigation methods offered in this study. Compliance with the 45 dBA Ldn residential interior noise standard and the *California Noise Insulation* standards are expected to be met with typical mitigation methods, and will be confirmed when the final acoustical study is completed.

The analysis and design presented in this study comply with applicable City of Santa Barbara requirements for control of community noise impacts for outdoor and indoor living areas.

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Exhibits

Exhibit A **Location Map**

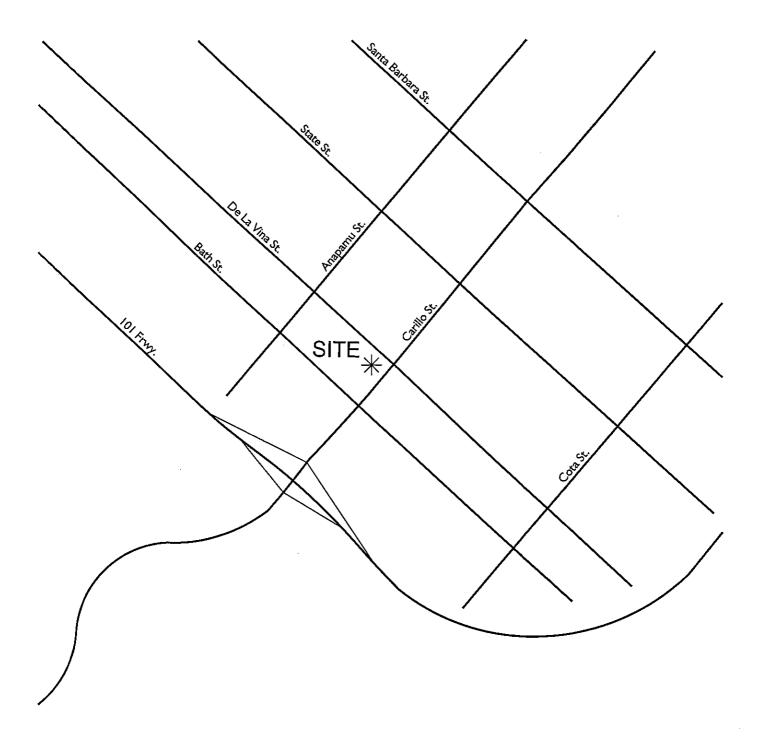
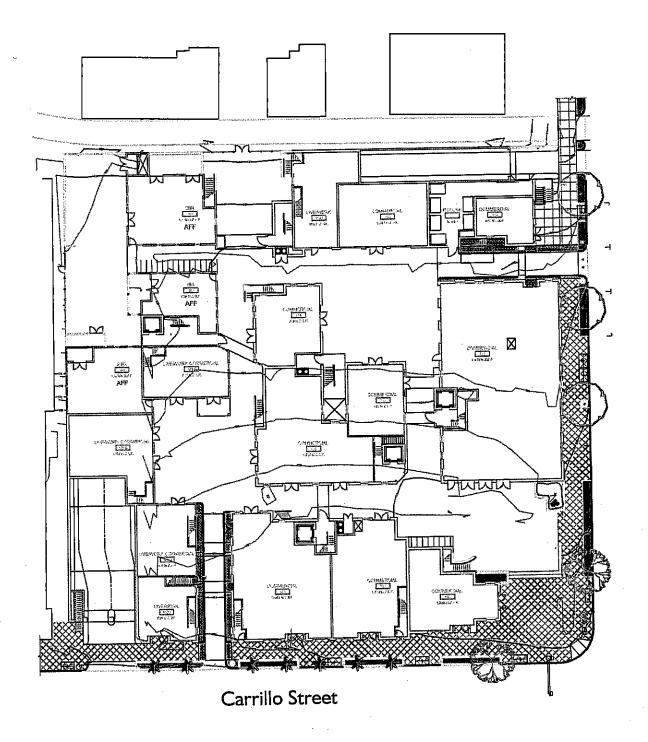






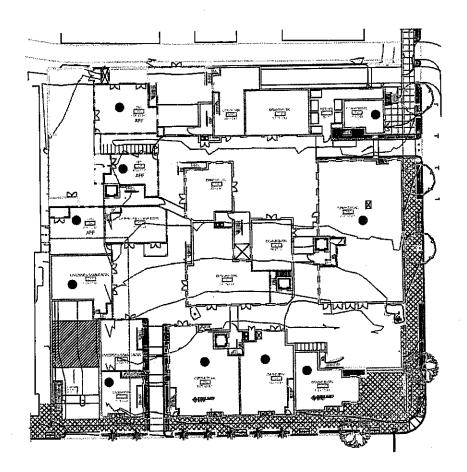
Exhibit B **Site Plan**



First Floor

NOTE:

- Since multiple mitigation methods are being offered to reduce noise impacts emanating from the Sav-On HVAC unit, the requirements are detailed on Table 3.
- There are no qualifying exterior liveable spaces (i.e. balconies or community areas) that are directly impacted on the ground level of the project.
- Units 101 and 102 will likely NOT require the "windows closed" conditions if the HVAC unit is relocated from its current position on the Sav-On rooftop.



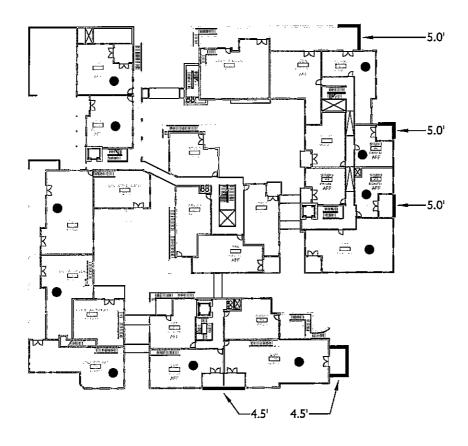
Legend:

 Unit Requires a "Windows Closed" Condition Necessitating a means of mechanical fresh-air Ventilation, See Summary of Mitigation Requirements Section of this Report for More Detailed Information

Second Floor

NOTE:

- Since multiple mitigation methods are being offered to reduce noise impacts emanating from the Sav-On HVAC unit, the requirements are detailed on Table 3.
- Units 201 and 202 will likely NOT require the "windows closed" conditions if the HVAC unit is relocated from its current position on the Sav-On rooftop.



Legend:

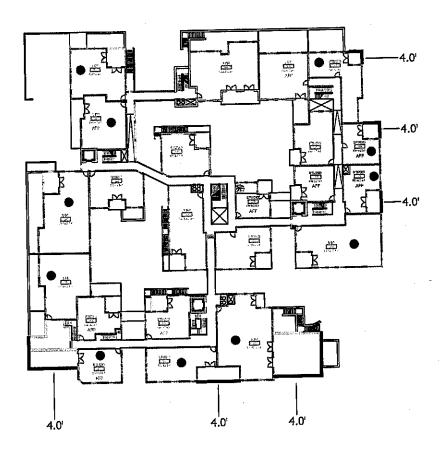
- Unit Requires a "Windows Closed" Condition Necessitating a means of mechanical fresh-air Ventilation, See Summary of Mitigation Requirements Section of this Report for More Detailed Information
- = Noise Control Barrier Required (minimum height indicated in feet)



Third Floor

NOTE:

- Since multiple mitigation methods are being offered to reduce noise impacts emanating from the Sav-On HVAC unit, the requirements are detailed on Table 3.
- Units 301 and 302 will likely NOT require the "windows closed" conditions if the HVAC unit is relocated from its current position on the Sav-On rooftop.



Legend:

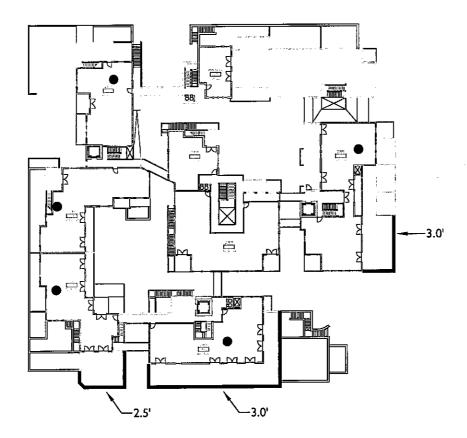
- Unit Requires a "Windows Closed" Condition Necessitating a means of mechanical fresh-air Ventilation, See Summary of Mitigation Requirements Section of this Report for More Detailed Information
- Noise Control Barrier Required (minimum height indicated in feet)



Fourth Floor

NOTE:

- Since multiple mitigation methods are being offered to reduce noise impacts emanating from the Sav-On HVAC unit, the requirements are detailed on Table 3.
- Unit 401 will likely NOT require the "windows closed" condition if the HVAC unit is relocated from its current position on the Sav-On rooftop.

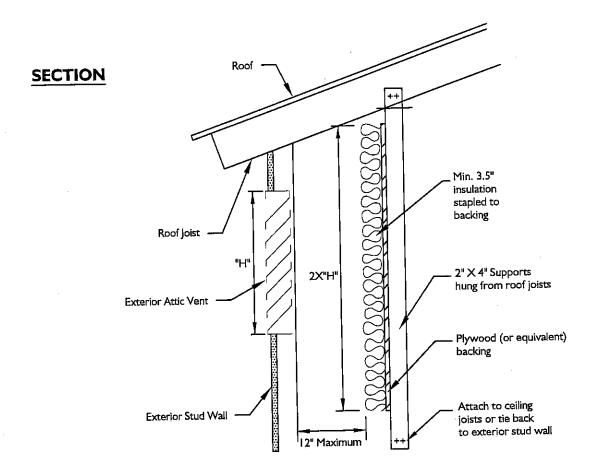


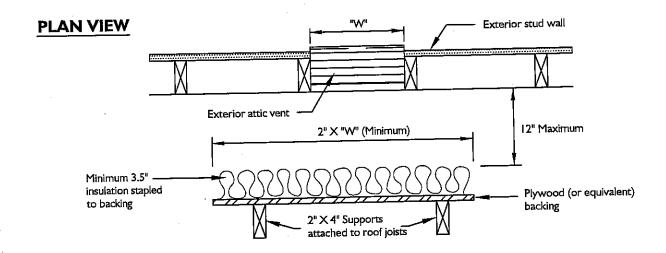
Legend:

- Unit Requires a "Windows Closed" Condition Necessitating a means of mechanical fresh-air Ventilation, See Summary of Mitigation Requirements Section of this Report for More Detailed Information
- Noise Control Barrier Required (minimum height indicated in feet)



Attic Vent Acoustical Baffle Detail





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Tables

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TABLE 1
Future Exterior Noise Levels - Roadways and Ralph's (dBA Ldn)¹

				igated Exterior e Level From ²		Noise Barrier	Final
Impacted Units' Balconies	Floor	Carrillo Street	De La Vina Street	Ralph's Mech. Equip. and Loading Docks	All Sources (combined)	Minimum Height (in feet) ³	Projected Exterior Noise Level
208	2	69.4			69.4	4.5	59.3
214	2		62.3	59.0	64.0	5.0	59.9
311	3	67.9	60.4		68.6	4.0	59.2
314	٠	1	63.1	59.0	64.5	4.0	60 <u>.</u> 0
404	4.	67.6			67.6	2.5	58.9
405	+		62.5	59.0	64.1	3.0	59.7

¹ There are no qualifying first-floor exterior livable spaces that required analysis, hence only floors 2 through 4 are indicated.

² "__" indicates no noise impacts from corresponding noise source.

³ Barrier height (shown in feet) is to be above the corresponding unit's finished floor elevation.

TABLE 2¹
Future Exterior Noise Levels - Sav-On HVAC Unit (dBA Ldn)

				leight ed at:			
		HVAC		HVAC	Both HVAC a	and Balcony ²	Mitigated
Unit Balcony	Floor	Noise Impact	Balcony Only	Unit Only	HVAC Unit	Balcony	Noise Level ³
104	1	60.7	6.5	12.0	6.5		<60.0
105R	2	73.3	11.5	12.0	6.5	6.0	<60.0
107R	2	74.1	12.5	12.0	6.5	6.0	<60.0
204	2	65.5	6.5	12.0	6.5		<60.0
304	3	61.1	5.0	12.0	6.5		<60.0
305	3	74.1	9.0	12.0	6.5	4.0	<60.0
307	3	71.7	8.0	12.0	6.5	4.0	<60.0
401	4	61.1	5.0	12.0	6.5		<60.0
402	4	66.1	5.0	12.0	6.5		<60.0

All Units HVAC Impacted Balcony's Requiring Mitigation Barriers

		Minimum Required Barrier Height According to Mitigation Method (in feet)				
		at	at HVAC Unit	at HVAC a	nd Balcony	
Unit	Floor	Balcony Only	Only	HVAC	Balcony	
102	1	6.5	12.0	6.0		
104		6.5	12.0	6.0	~ -	
105R		11.5	12.0	6.0	6.0	
107R	2	12.5	12.0	6.0	6.5	
202	2	6.5	12.0	6.0		
204		6.5	12.0	6.0		
302	·	5.0	12.0	6.0		
304	3	5.0	12.0	6.0		
305	J	9.0	12.0	6.0	4.0	
307		8.0	12.0	6.0	4.0	
401	4	5.0	12.0	6.0	· - -	
402		5.0	12.0	6.0		

Adjacent Sav-On roof-mounted HVAC unit noise impacts are listed in this separate table, as these units are not impacted by the other noise sources cited in this study.

Relocation of the HVAC is ultimately the best method of mitigation (not shown), however of the three types of mitigation shown here, the combination barriers (at HVAC and Balconies) is most preferred.

³ All of the presented noise mitigation methods bring the adjacent Sav-On's roof mounted HVAC unit's noise impacts into compliance, however with differing results; see Appendix C for individual results.

TABLE 3
Future Interior Noise Levels (dBA Ldn)

		Noise Impact at	Minimum Required Interior Noise	Calculated Interior Noise Level Using Standard California Construction Windows (STC = 25) "Windows "Windows Open" Closed"		Minimum Required STC Rating for Corresponding Unit ²
Lot	Floor	Facade ¹	Reduction			
107C		68.8	23.8	56.8	48.8	>25
110	1	69.8	24.8	57.8	49.8	>25
111		65.3	20.3	53.3	45.3	>24
208	2	70.0	25.0	58.0	50.0	>25
214	2	62.7	17.7	50.7	42.7	>25
311	3	69.0	24.0	57.0	49.0	>25
314	ر	63.5	18.5	51.5	43.5	>25
404	4	67.1	22.1	55.1	47.1	>25
405		62.2	17.2	50.2	42.2	>25

¹ Indicated noise impacts could be from multiple sources; see Appendicies B and C for individual calculation information.

² It is assumed that the indicated STC window rating will be sufficient for most units, however, this must be confirmed in the final acoustical study that will need to be performed prior to obtaining building permits.

TABLE 4
Roadway Parameters and Vehicle Distribution

Roadway	Lanes	Buildout ADT ¹	Speed (MPH)	Site Conditions	
Carrillo Street	5	35,400	30	Hard	
De La Vina Street	4	13,300	25	Hard	

Vehicle Distribution (Truck Mix)¹

	Vehicle Type	Daytime % (7 AM to 7 PM)	Evening % (7 PM to 10 PM)	Night % (10 PM to 7 AM)	Total % of Traffic Flow
Street Vina et	Automobiles	77.5	12.9	9.6	97.42
Carrillo S & De La Stree	Medium Trucks	84.8	4.9	10.3	1.84
& G	Heavy Trucks	86.5	2.7	10.8	0.74

¹ Source: Acoustical Analysis Report (Draft R1) Radio Square, prepared by McKay Conant Brook, Inc., dated June 9, 2006.

Appendices

Appendix A

City of Santa Barbara Comments On Original Acoustical Study



City of Santa Barbara Planning Division

30-DAY DEVELOPMENT APPLICATION REVIEW TEAM (DART) COMMENTS

July 14, 2006

Steve Yates Conceptual Motion Company 1501 Chapala Street Santa Barbara, CA 93101

SUBJECT: 30-DAY DEVELOPMENT APPLICATION REVIEW FOR 210 W.

CARRILLO ST., MST#2005-00722

DART MEETING DATE: Wednesday, July 19, 2006 at 1:45 pm. — 2:30 pm. 630 Garden Street Housing & Redevelopment Conference Room, 2nd Floor

Dear Mr. Yates:

I. INTRODUCTION

The City accepted the development application for the subject project for 30-day review on June 16, 2006. The project consists of demolishing the Radio Square commercial site containing 18,547 square feet of various retail and service commercial uses and constructing a four-story mixed use project with 55 residential units and 18,530 square feet of commercial space. The commercial space would include 14,265 square feet of retail commercial space in nine commercial condominiums and 4,265 square feet of live/work commercial and office space located in five ground-floor units. Subterranean parking is proposed with a total of 176 parking spaces. Vehicular access to and from the parking area is proposed with an entrance and exit ramps along Carrillo Street and De la Vina Street.

A pre-application was received and reviewed by Staff in November of 2005 for a mixed-use project. The Historic Landmarks Commission (HLC) conceptually reviewed the proposed development on May 3, 2006. The Planning Commission reviewed the project on May 4, 2006. Based on input from Staff and the City's reviewing bodies, the project was modified to its current form.

The information reviewed by the DART included a Proposed Traffic Plan (construction) prepared by American Integrate Services, Inc., (not dated) and R&G builders dated June 12, 2006; a Phase I Traffic and Parking Study prepared by Associated Transportation Engineers, dated June 15, 2006; a Preliminary Foundation Investigation prepared by Pacific Materials

30-DAY DEVELOPMENT APPLICATION REVIEW TEAM COMMENTS 210 W. CARRILLO ST. (MST2005-00722)
JULY 13, 2006
PAGE 2 OF 21

Laboratory, dated February 15, 2006; a Preliminary Geologic Hazards Evaluation prepared by Campbell-Geo, Inc., dated May 25, 2006; a Site remediation mandate prepared by the California Regional Water Quality Control Board (CRWQCB), dated January 7, 2005; a hazardous material site remediation letter prepare by Kennedy/Jenks, dated June 14, 2006; a Phase I Archaeological Resources Report prepared by Stone Archaeological Consulting, dated June, 2006; an Arborist Report prepared by Bill Spiewak, dated March 27, 2006; an Acoustical Analysis Report prepared by McKay Conant Brook, dated June 2006; a Fire Protection/Life Safety and ADA Narrative prepared by Schirmer Engineering, dated June 8, 2006; and a plan set prepared by the Conceptual Motion Company, dated June 14, 2006.

The City has 30 days from the date a development application is accepted for processing to determine if the application is "complete" (i.e. contains all of the required information necessary for project analysis and decision). During the 30-day application review period, the development application is forwarded to various City land development departments and divisions for their review, comments, and completeness determination. The City is required to notify a project proponent within the 30-day application review period of its determination as to development application completeness.

If a development application is determined to be "incomplete," the City will specify in writing to the project proponent the additional information required. The application will be placed "on-hold" until the required information is received. Not later than 30 days from receipt of the additional information, the City will again determine if the application is "complete." If the application remains incomplete, the City will again transmit its determination to the project proponent and specify the additional information required. If the City determines the application is "complete", further processing shall commence. Further processing includes environmental review of the proposed project, analysis for compliance with applicable plans, policies, ordinances, codes, etc., and action on the proposed project application by the appropriate decision-making body(ies).

Also, during the 30-day application review period, I was assigned as the lead contact regarding this project. Any questions or concerns you may have relative to the processing of the development application should be directed to me at (805) 564-5470.

II. COMPLETENESS DETERMINATION

The purpose of this letter is to notify you that the development application for the subject project is "incomplete," and additional information is required. The required additional information is specified below.

III. REQUIRED ADDITIONAL INFORMATION

Staff has identified the following information as necessary in order to adequately review the proposed development project. Subsequent applications will not be accepted without this information.

A. <u>Planning Division</u>

1. The Acoustical Analysis Report incorrectly identifies the document and policies governing the standards within the City as the County of Santa Barbara

Noise Element. Revise the report to reflect the City of Santa Barbara Noise Element and policies. The report needs to include the noise impacts to both interior and exterior (patios and decks) residential spaces. Note that the City's policy standard is more stringent than that of the County. The City threshold for impacts to exterior residential space is 60 Ldn not 65.

Relative to mitigation measures already identified, holidays cited should be City holidays, not state holidays. Notification to adjacent properties of pending construction should be two weeks to a month prior to construction. Noise barriers need to be defined (type and place) or the mitigation should be changed to require a noise barrier (or some other name) plan to be prepared by the noise consultant that verifies that construction noise levels are reduced to the most reasonable extent possible and said plan is to be submitted prior to issuance of a building permit.

On page seven a reference is made that rail is not in the project vicinity. It is a few blocks away, although the freeway most likely is the dominant noise source. The report should be amended to correctly reflect this fact.

- 2. Update the plan sheet G001 and the next to last page of the DART Application Letter item 5. Currently the plans indicate a square footage of 18,530 square feet while the letter indicates 19,088 square feet.
- 3. Provide information and documentation, if any, of the meeting with the Regional Water Quality Control Board (RWQCB) regarding the site conditions and the preparation of a Corrective Action Plan (CAP). The CAP should be submitted to the Count Protection Services Division. If CAP has already been submitted to the County, please provide the assigned case person.

Also, The Preliminary Foundation Investigation report indicates that, in order to construct the underground parking, dewatering will be required. Provide where the water will be discharged and information regarding obtaining permits from the RWQCB

- 4. Correct the project description figures on page 1 of the Traffic and Parking Study. The live work net square footage is listed as 14,625 instead of 14,265 and the total gross commercial square footage is shown as 18,503 instead of 18,530.
- 5. Staff is unable to complete a determination of the project's visual impacts (including cumulative impacts in the Carrillo and Chapala area). Provide a conceptual/perspective representation of the project from various points of view including from Highway 101.
- 6. Amend the Geologic Hazards Evaluation (page 2) to reflect the City of Santa Barbara Seismic Safety Element instead of the County's.

B. <u>Engineering Division</u>

Recycling and Trash:

Add to site plans:

Appendix B

Roadway Noise Impact Calculations

PROJECT: Radio Sq	nare - Santa	Barbara			JOB #:	1512-06-08
ROADWAY: Carillo	dare samou	Darsara			DATE:	15-Sep-06
LOCATION: Unit 107	C (1st Floor	Facade) ·	- по	wall	BY:	Mike Rosa
DOCATION: OHIC 107	C (13C 11001	racaac,	110	***************************************		
ADT = 35,400	· 			<u></u>	PK HR VOL =	3,540
SPEED = 30					٠	
PK HR % = 10						
CTL DIST= 51						
DIST N/F= 36				AUTO SLE	DISTANCE =	47.98
DT WALL= 51				MED TRUCK	SLE DIST=	47.79
DT W/OB= 0				HVY TRUCK	SLE DIST=	47.81
HTH WALL= 0.0	******					
OBS HTH= 5.0						
AMBIENT= 0.0						
ROADWAY VIEW:	LF ANGLE=	-90				
	RT ANGLE=					
	DF ANGLE=					
SITE CONDITIONS (1			SITE)			
AUTOMOBILES =	10					
MEDIUM TRUCKS =	10			מטאחם אח.ד	USTMENT=	0.00
HEAVY TRUCKS =					NT TO HEAVY	
	10 1. (0. WMII 1. D	EDM)		מייד פט טעא)	MI IO HEAVI	IROCKD
BARRIER = 1 PAD EL = 0.0	L (U=WALL, I=B	ERM)		EL AUTOMO	DTT 00 _	0.0
					TRUCKS=	2.3
ROAD EL = 0.0						8.0
GRADE = 0.1	ቼ			EL HEAVY	TRUCKS =	8.0
VEHICLE TYPE			DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	<u> </u>	0	.775	0.129	0.096	0.9742
MEDIUM TRUCKS		0	.848	0.049	0.103	0.0184
HEAVY TRUCKS		0	.865	0.027	0.108	0.0074
	NOISE IMPAC	TS WITHOU	T TOP	O OR BARRI	ER SHIELDING	3
	PK HR LEQ	DAY	LEQ	EVEN LEQ	NIGHT LEQ	LDN
AUTOMOBILES LEQ	67.9			64.3		66.8
MEDIUM TRUCKS LEQ						
HEAVY TRUCKS LEQ						
VEHICULAR NOISE	69.8		68.1	64.9	60.2	68.8
ANUTCOTTAK MOT2R	07.0			04.7	JU.2	30,0
	NOISE IMPAC	TS WITH T	OPO A	ND BARRIER	SHIELDING	
	PK HR LEQ	DAY :	LEQ	EVEN LEQ	NIGHT LEQ	LDN
VEHICULAR NOISE						
				W/O AMBIE	NT	W/ AMBIENT
PK HR LEQ WITHOUT	TOPO OR BARR	IER =		69.8		69.8
MIT PK HR LEQ WITH					*****	
LDN WITHOUT TOPO A				68.8		68.8
MIT LDN WITH TOPO					*****	
		•				_

	uare - Santa Barbara		#:	1512-06-08
ROADWAY: Carillo			E:	15-Sep-06
LOCATION: Unit 110	(1st Floor Facade) - no wa	all BY:		Mike Rosa
ADT = 35,400		PK	HR VOL =	3,540
SPEED = 30				
PK HR % = 10				
CTL DIST= 51				
DIST N/F= 36	A	AUTO SLE DIST	ANCE =	47.98
DT WALL= 51	M	MED TRUCK SLE	DIST=	47.79
DT W/OB= 0	H	IVY TRUCK SLE	DIST=	47.81
HTH WALL= 0.0	*****			
OBS HTH= 5.0				
AMBIENT= 0.0				
ROADWAY VIEW:	LF ANGLE= -90			
	RT ANGLE= 90			
	DF ANGLE= 180			
SITE CONDITIONS (1	0=HARD SITE, 15=SOFT SITE)			
AUTOMOBILES =	10			
MEDIUM TRUCKS =	10 9	RADE ADJUSTM	ENT=	0.00
HEAVY TRUCKS =	10 (T TMEMTRULGA)	O HEAVY	TRUCKS)
BARRIER =	L (0=WALL,1=BERM)			
PAD EL = 0.0	E	L AUTOMOBILE	S =	0.0
ROAD EL = 0.0	н	L MEDIUM TRU	CKS=	2.3
GRADE = 0.1	% E	EL HEAVY TRUC	KS =	8.0
VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074
			******** D.T.T.T.	
	NOISE IMPACTS WITHOUT TOPO	OR BARRIER S	HIELDING	Ť
	PK HR LEQ DAY LEQ E	EVEN LEQ NIG	HT LEQ	LDN
AUTOMOBILES LEQ	67.9 66.0	64.3		
MEDIUM TRUCKS LEQ		53.4		60.3
HEAVY TRUCKS LEQ	63.0 61.6	52.5	53.8	62.1
VEHICULAR NOISE	69.8 68.1	64.9		68.8
	NOISE IMPACTS WITH TOPO AND	D BARRIER SHI	ELDING	
	PK HR LEQ DAY LEQ E	EVEN LEO NTC	HT LEO	LDN
	69.8 68.1			
	7	VO AMBIENT		W/ AMBIENT
שמו עם די שר מדי מח אם		V/O AMBIENT		
-	TOPO OR BARRIER =	69.8		69.8
MIT PK HR LEQ WITH	TOPO OR BARRIER =	·		69.8

NOISE LEVEL ADDITION (dBA)

Unit 110 (Commercial) - Roadways + Ralph's Mechanical/Truck Deliveries

at Facade (unmitigated)

Street Name	Noise Level (dBA)	10^dBA/10
Carrillo	68.8	7,585,775.8
De La Vina	60.9	1,230,268.8
Ralph's louvers/Truc	k del. 59.0	794,328.2
Combined Noise Level	dBA)= 69.8	9,610,372.8

Total Combined Noise Impacts to					
At Facade					
69.8	N/A	N/A	n/a		

PROJECT: Radio So	uare - Santa Barbara		JOB #:	1512-06-08
ROADWAY: De La Vi			DATE:	15-Sep-06
LOCATION: Unit 110	(1st Floor Facade) - no	wall	BY:	Mike Rosa
ADT = 13,300			PK HR VOL =	- 1,330
SPEED = 25				
PK HR % = 10				
CTL DIST= 75				
DIST N/F= 24		AUTO SLE	DISTANCE =	74.20
DT WALL= 75			SLE DIST=	
DT W/OB= 0		HVY TRUCK	SLE DIST=	74.09
HTH WALL= 0.0	****			
OBS HTH= 5.0				
AMBIENT= 0.0	(Raplph's louvers)			
ROADWAY VIEW:	LF ANGLE= -90			
	RT ANGLE= 90			
	DF ANGLE= 180			
SITE CONDITIONS (1	0=HARD SITE, 15=SOFT SITE)			
AUTOMOBILES =	10			
MEDIUM TRUCKS =	10	GRADE ADJ	USTMENT=	0.00
HEAVY TRUCKS =	10	(ADJUSTME	NT TO HEAVY	TRUCKS)
BARRIER =	L (0=WALL,1=BERM)			
PAD EL = 0.0		EL AUTOMO	BILES =	0.0
ROAD EL = 0.0		EL MEDIUM	TRUCKS=	2.3
GRADE = 0.1	95	EL HEAVY	TRUCKS =	8.0
VEHICLE TYPE	DA:	evening	NIGHT	DAILY
AUTOMOBILES	0.775		0.096	
MEDIUM TRUCKS	0.848		0.103	
HEAVY TRUCKS	0.865	0.027	0.108	0.0074
	NOISE IMPACTS WITHOUT TOP	O OR BARRI	ER SHIELDIN	G
	PK HR LEQ DAY LEQ	EVEN LEO	NIGHT LEQ	LDN
AUTOMOBILES LEO	-	55.8		58.4
MEDIUM TRUCKS LEQ			44.5	
	56.1 54.7			
VEHICULAR NOISE	61.9 60.2	56.6	52.4	60.9
	NOISE IMPACTS WITH TOPO A	ND BARRIER	SHIELDING	
				
	PK HR LEQ DAY LEQ			
VEHICULAR NOISE	61.9 60.2	56.6	52.4	60.9
		W/O AMBIE	NT	W/ AMBIENT
PK HR LEQ WITHOUT	TOPO OR BARRIER =	61.9		61.9
MIT PK HR LEQ WITH	TOPO AND BARRIER =	61.9	*****	61.9
LDN WITHOUT TOPO A	ND BARRIER =	60.9		60.9
MIT LDN WITH TOPO	AND BARRIER =	60.9	*****	60.9

NOISE LEVEL ADDITION (dBA)

Unit 111 (Commercial) - Roadways + Ralph's Mechanical/Truck Deliveries

at Facade (unmitigated)

Street Name	Noise Level (dBA)	10^dBA/10
De La Vina	64.2	2,630,268.0
Ralph's Mech+Truck Del		794,328.2
Combined Noise Level (de	65.3	3,424,596.2

Total Combined Noise Impacts to					
At Facade					
65.3	N/A	N/A	N/A		

PROJECT: Radio Square - Santa Barbara	JOB #:	1512-06-08
ROADWAY: De La Vina	DATE:	15-Sep-06
LOCATION: Unit 111 (1st Floor Facade) - no wall	BY:	Mike Rosa
ADT = 13,300	PK HR VOL	= 1,330
SPEED = 25	•	
PK HR % = 10		
CTL DIST= 36		
DIST N/F= 24 AUTO S	SLE DISTANCE =	34.31
DT WALL= 36 MED TF	RUCK SLE DIST=	34.05
DT W/OB= 0 HVY TF	RUCK SLE DIST=	34.07
HTH WALL= 0.0 ******		
OBS HTH= 5.0		
AMBIENT= 0.0 (Raplph's louvers)		
ROADWAY VIEW: LF ANGLE= -90		
RT ANGLE= 90		
DF ANGLE= 180		
SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)		
AUTOMOBILES = 10		
	ADJUSTMENT=	0.00
	STMENT TO HEAVY	
BARRIER = 1 (0=WALL, 1=BERM)	311	,
•	romobiles =	0.0
	DIUM TRUCKS=	2.3
	AVY TRUCKS =	
GRADE = 0.1 t	171 11100110 -	
VEHICLE TYPE DAY EVEN	NING NIGHT	r DAILY
AUTOMOBILES 0.775 0.3		
	0.103	
HEAVY TRUCKS 0.865 0.0	0.108	0.0074
NOISE IMPACTS WITHOUT TOPO OR BE	ARRIER SHIELDIN	īG
PK HR LEQ DAY LEQ EVEN I	LEQ NIGHT LEQ	LDN
AUTOMOBILES LEQ 62.8 60.9 59	9.2 53.1	61.7
MEDIUM TRUCKS LEQ 57.3 55.8 49	9.4 47.9	56.3
HEAVY TRUCKS LEQ 59.5 58.1 49	9.0 50.3	58.6
VEHICULAR NOISE 65.3 63.5 60	0.0 55.7	64.2
VEHICULAR NOISE 65.3 63.5 60 NOISE IMPACTS WITH TOPO AND BARD		
NOISE IMPACTS WITH TOPO AND BAR	RIER SHIELDING	
	RIER SHIELDING	TDN
NOISE IMPACTS WITH TOPO AND BARRY PK HR LEQ DAY LEQ EVEN I VEHICULAR NOISE 65.3 63.5 66	RIER SHIELDING	LDN 64.2
NOISE IMPACTS WITH TOPO AND BARRY PK HR LEQ DAY LEQ EVEN I VEHICULAR NOISE 65.3 63.5 66 W/O AM	RIER SHIELDING LEQ NIGHT LEQ 0.0 55.7	LDN 64.2
NOISE IMPACTS WITH TOPO AND BARRY PK HR LEQ DAY LEQ EVEN I VEHICULAR NOISE 65.3 63.5 66 W/O AM PK HR LEQ WITHOUT TOPO OR BARRIER = 65	RIER SHIELDING LEQ NIGHT LEQ 0.0 55.7 MBIENT	LDN 64.2 W/ AMBIENT 65.3
NOISE IMPACTS WITH TOPO AND BARN PK HR LEQ DAY LEQ EVEN I VEHICULAR NOISE 65.3 63.5 66 W/O AM PK HR LEQ WITHOUT TOPO OR BARRIER = 69 MIT PK HR LEQ WITH TOPO AND BARRIER = 69	RIER SHIELDING LEQ NIGHT LEQ 0.0 55.7 MBIENT 5.3	LDN 64.2 W/ AMBIENT 65.3

PROJECT: Radio Sq	uare - Santa	Barbara	 ,	JOB #:	1512-06-08
ROADWAY: Carrillo				DATE:	15-Sep-06
LOCATION: Unit 208		no wall)			Mike Rosa
DOCALLOW. OHIE 200		,			
ADT = 35,400				PK HR VOL =	3,540
SPEED = 30					
PK HR % = 10					
CTL DIST= 41					
DIST N/F= 36			AUTO SLE	DISTANCE =	41.92
DT WALL= 36			MED TRUCK	SLE DIST=	40.87
DT W/OB= 5			HVY TRUCK	SLE DIST=	38.74
HTH WALL= 0.0	*****				
OBS HTH= 20.0					
AMBIENT= 0.0					
ROADWAY VIEW:	LF ANGLE=	-90			
	RT ANGLE=	90			
	DF ANGLE=	180			
SITE CONDITIONS (1	0=HARD SITE,	15=SOFT SITE)			
AUTOMOBILES =	10				
MEDIUM TRUCKS =	10		GRADE ADJ	USTMENT=	0.00
HEAVY TRUCKS =			(ADJUSTME	NT TO HEAVY	TRUCKS)
BARRIER =			•		
PAD EL = 0.0	(5 /////////	,	EL AUTOMO	BILES =	0.0
ROAD EL = 0.0				TRUCKS=	2.3
GRADE = 0.1	&			TRUCKS =	8.0
GRADE - 0.1	Ů				
VEHICLE TYPE		DAY	Y EVENING	NIGHT	DAILY
AUTOMOBILES		0.775	0.129	0.096	0.9742
MEDIUM TRUCKS		0.848	0.049	0.103	0.0184
HEAVY TRUCKS		0.865	0.027	0.108	0.0074
	NOISE IMPAC	CTS WITHOUT TOP	O OR BARRI	ER SHIELDING	
	PK HR LEO	DAY LEO	EVEN LEO	NIGHT LEQ	LDN
AUTOMOBILES LEO	_	66.6		58.8	67.4
MEDIUM TRUCKS LEQ	68.5				_
				54.7	
HEAVY TRUCKS LEQ	63.7	62.5	22.4	24.7	05,1
VEHICULAR NOISE	70.5	68.7	65.5	60.9	69.4
	NOISE IMPAG	CTS WITH TOPO A	ND BARRIER	S SHIELDING	<u></u>
	DK HB TEO	DAY LEQ	EVEN LEO	NIGHT LEO	LDN
VEHICULAR NOISE	70.5			60.9	
			W/O AMBIE	יתאי	W/ AMBIENT
חע עם נפט שלחווטיים	יים אם אם איים	— стр	70.5		70.5
PK HR LEQ WITHOUT			70.5		
MIT PK HR LEQ WITH			70.5 69.4		69.4
LDN WITHOUT TOPO A		=	69.4	*****	
MIT LDN WITH TOPO	AND BARRIER	=	09.4		09.4

PROJECT: Radio Sq	uare - Santa Bark	para	 	JOB #:	1512-06-08
ROADWAY: Carrillo					15-Sep-06
LOCATION: Unit 208		1)			Mike Rosa
Localiton, only 200	2020011 (,	,			
ADT = 35,400	<u> </u>			PK HR VOL =	3,540
SPEED = 30					
PK HR % = 10					
CTL DIST= 41					
DIST N/F= 36			AUTO SLE	DISTANCE =	41.80
DT WALL= 36			MED TRUCK	SLE DIST=	40.63
DT W/OB= 5	•		HVY TRUCK	SLE DIST=	38.25
HTH WALL= 19.5	(4.51)				
OBS HTH= 20.0					
AMBIENT= 0.0					
ROADWAY VIEW:	LF ANGLE= -90				
	RT ANGLE= 90				
	DF ANGLE= 180				
SITE CONDITIONS (1		OFT SITE	-		
AUTOMOBILES =	10				
	10		CONDE NOT	USTMENT=	0.00
				NT TO HEAVY	
HEAVY TRUCKS =	_		(ADOUG11E	MI TO HEAVI	TRUCKS)
BARRIER =	. (U=WALL, I=BERM)		ET RIMPONO	BILES =	0.0
PAD EL = 0.0				TRUCKS=	
ROAD EL = 0.0	n				
GRADE = 0.1	*		YVANH LIN	TRUCKS =	8.0
VEHICLE TYPE		DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	<u> </u>	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS		0.848	0.049	0.103	0.0184
HEAVY TRUCKS		0.865	0.027	0.108	0.0074
					_
	NOISE IMPACTS WI	ITHOUT TOP	O OR BARRI	ER SHIELDIN	G
	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN
AUTOMOBILES LEQ	68.5	66.6	64.9	58.8	67.4
MEDIUM TRUCKS LEQ	62.0	60.5	54.1	52.6	61.1
HEAVY TRUCKS LEQ	64.0	62.5	53.5	54.8	63.1
VEHICULAR NOISE	70.5	68.8	65.5	60.9	69.5
	NOISE IMPACTS WI	ITH TOPO A	ND BARRIER	SHIELDING	·····
	PK HR LEQ	DAY LEO	EVEN LEO	NIGHT LEO	LDN
VEHICULAR NOISE	•	58.6			
			W/O AMBIE	NT	W/ AMBIENT
PK HR LEQ WITHOUT	TOPO OR BARRIER	=	70.5	•	70.5
MIT PK HR LEQ WITH			60.3	*****	
LDN WITHOUT TOPO A		=	69.5		69.5
			59.3	*****	
MIT LDN WITH TOPO	WINT DAKKIRK	=	3,50		٠.٠٠

PROJECT: Radio Square - Santa	Barbara		JOB #:	1512-06-08
ROADWAY: Carrillo			DATE:	15-Sep-06
LOCATION: Unit 208 - Facade (no	- w=11\		BY:	-
DOCATION: OHIE 200 - Pacade (inc	y wair,			
ADT = 35,400			PK HR VOL =	3,540
SPEED = 30				
PK HR % = 10				
CTL DIST= 36				
DIST N/F= 36		AUTO SLE	DISTANCE =	37.04
DT WALL= 36		MED TRUCK	SLE DIST=	35.85
DT W/OB= 0		HVY TRUCK	SLE DIST=	33.40
HTH WALL= 0.0 ******				
OBS HTH= 20.0				
AMBIENT= 0.0				
ROADWAY VIEW: LF ANGLE=	-90			
RT ANGLE=	90			
DF ANGLE=	180			
SITE CONDITIONS (10=HARD SITE,	15=SOFT SITE)			
AUTOMOBILES = 10				
MEDIUM TRUCKS = 10		GRADE ADJ	USTMENT=	0.00
HEAVY TRUCKS = 10			NT TO HEAVY	
BARRIER = 1 (0=WALL, 1=B)	EDM)	(120002112		2000 02-27
PAD EL = 0.0	ERC-1)	ET. ATTTOMO	BILES =	0.0
			TRUCKS=	2.3
		EL HEAVY		8.0
GRADE = 0.1 %		BD HEAVI	IROCIA -	0.5
VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074
NOISE IMPAC	TS WITHOUT TOP	O OR BARRI	ER SHIELDING	5
PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN
AUTOMOBILES LEQ 69.0	67.1	65.4	59.3	67.9
MEDIUM TRUCKS LEQ 62.6	61.0	54.7	53.1	61.6
HEAVY TRUCKS LEQ 64.5	63.1	54.1	55.3	63.7
VEHICULAR NOISE 71.0	69.3	66.0	61.5	70.0
VEHICULAR NOISE 71.0	69.3	66.0	61.5	70.0
·	69.3 TS WITH TOPO A			70.0
NOISE IMPAC	TS WITH TOPO A	ND BARRIER	SHIELDING	
NOISE IMPAC	TS WITH TOPO A	ND BARRIER	SHIELDING	LDN 70.0
NOISE IMPAC	TS WITH TOPO A DAY LEQ 69.3	ND BARRIER EVEN LEQ 66.0	SHIELDING	LDN 70.0
NOISE IMPACTOR PK HR LEQ VEHICULAR NOISE 71.0	TS WITH TOPO A DAY LEQ 69.3	ND BARRIER EVEN LEQ 66.0	SHIELDING NIGHT LEQ 61.5	LDN 70.0
NOISE IMPACT PK HR LEQ PK HR LEQ WITHOUT TOPO OR BARR.	DAY LEQ 69.3	ND BARRIER EVEN LEQ 66.0 W/O AMBIE 71.0	SHIELDING NIGHT LEQ 61.5	LDN 70.0 W/ AMBIENT 71.0
NOISE IMPACTOR PK HR LEQ VEHICULAR NOISE 71.0	DAY LEQ 69.3 IER = RRIER =	ND BARRIER EVEN LEQ 66.0 W/O AMBIE 71.0	SHIELDING NIGHT LEQ 61.5 NT	LDN 70.0 W/ AMBIENT 71.0

NOISE LEVEL ADDITION (dBA)

Unit 214 (Residential) - Roadway + Ralph's Mechanical/Truck Deliveries

balcony (unmitigated)

Street Name	Noise Level (dBA)	10^dBA/10
De La Vina	62.3	1,698,243.7
Ralph's Mech+Truck Del		794,328.2
Combined Noise Level (de	A)= 64.0	2,492,571.9

balcony (mitigated)

Street Name	Noise Level (dBA)	10^dBA/10
De La Vina	52.7	186,208.7
Ralph's Mech+Truck De		794,328.2
Combined Noise Level (dBA) = 59.9	980,536.9

PROJECT: Radio Squ	uare - Canta Ba	rhara		JOB #:	1512-06-08
ROADWAY: De La Vin		LDara		DATE:	
LOCATION: Unit 214				BY:	=
LOCATION: UILL 214	- Barcony (no	wall)		D1 .	Marc Roba
ADT = 13,300				PK HR VOL =	1,330
SPEED = 25					
PK HR % = 10					
CTL DIST= 53					
DIST N/F= 24			AUTO SLE	DISTANCE =	54.35
DT WALL= 48			MED TRUCK	SLE DIST=	53.68
DT W/OB= 5			HVY TRUCK	SLE DIST=	52.40
HTH WALL= 0.0	******				
OBS HTH= 17.0					
AMBIENT= 0.0					
ROADWAY VIEW:	LF ANGLE= -9	0			
	RT ANGLE= 9	0			
	DF ANGLE= 18	30			
SITE CONDITIONS (1	0=HARD SITE, 15	=SOFT SITE)			
AUTOMOBILES =	1.0				
MEDIUM TRUCKS =	10		GRADE ADJ	USTMENT=	0.00
HEAVY TRUCKS =	10		(ADJUSTME	NT TO HEAVY	TRUCKS)
BARRIER = 1	(O=WALL,1=BERM	1)			
PAD EL = 0.0			EL AUTOMO	BILES =	0.0
ROAD EL = 0.0			EL MEDIUM	TRUCKS=	2.3
GRADE = 0.1	8		EL HEAVY	TRUCKS =	8.0
	-				
VEHICLE TYPE		DAY	EVENING	NIGHT	DAILY
AUTOMOBILES		0.775	0.129	0.096	0.9742
MEDIUM TRUCKS		0.848	0.049	0.103	0.0184
HEAVY TRUCKS		0.865	0.027	0.108	0.0074
	NOISE IMPACTS	WITHOUT TOP	O OR BARRI	ER SHIELDIN	G
	PK HR LEO	DAY LEO	EVEN LEO	NIGHT LEQ	LDN
AUTOMOBILES LEQ	60.8	_	57.2		59.8
MEDIUM TRUCKS LEQ					54.4
HEAVY TRUCKS LEQ					56.8
VEHICULAR NOISE	63.3	61.6	58.0	53.8	62.3
	NOISE IMPACTS	WITH TOPO A	ND BARRIER	SHIELDING	<u></u>

	PK HR LEQ				
VEHICULAR NOISE	63.3	61.6	58.0	53.8	62.3
			W/O AMBIE	NT	W/ AMBIENT
PK HR LEQ WITHOUT	TOPO OR BARRIER		63.3		63.3
MIT PK HR LEQ WITH			63.3	*****	63.3
LDN WITHOUT TOPO A			62.3		62.3
MIT LON WITH TOPO			62.3	*****	62.3

PROJECT: Radio Sq	uare - Santa B	arbara		JOB #:	1512-06-08
ROADWAY: De La Vi		arbara			15-Sep-06
LOCATION: Unit 214		ata 11)			Mike Rosa
HOCALLON: BILL 214	Luicony (w)	W. J. J. 7			
ADT = 13,300	,			PK HR VOL =	1,330
SPEED = 25					
PK HR % = 10					
CTL DIST= 53					
DIST N/F= 24			AUTO SLE	DISTANCE =	54.49
DT WALL= 48			MED TRUCK	SLE DIST=	53.75
DT W/OB= 5			HVY TRUCK	SLE DIST=	52.34
HTH WALL= 17.0	(5.0')				
OBS HTH= 17.0					
AMBIENT= 0.0					
ROADWAY VIEW:	LF ANGLE= -	90			
	RT ANGLE=				
	DF ANGLE= 1				
SITE CONDITIONS (1					
AUTOMOBILES =	10				
	10		GRADE ADT	USTMENT=	0.00
HEAVY TRUCKS =				NT TO HEAVY	
BARRIER = 1		м\	(ADO ODINE	142 10 11111112	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
PAD EL = 0.0	. (О=МАПП, Т=ВБК	14)	ET. ATECMA	BILES =	0.0
ROAD EL = 0.0				TRUCKS=	2.3
	0.			TRUCKS =	
GRADE = 0.1	₹		IVAGE LLA	IRUCKS -	0.0
VEHICLE TYPE		DAY	EVENING	NIGHT	DAILY
	<u> </u>				
AUTOMOBILES			0.129		
MEDIUM TRUCKS			0.049	0.103	
HEAVY TRUCKS		0.865	0.027	0.108	0.0074
	NOISE IMPACTS	WITHOUT TOP	O OR BARRI	ER SHIELDING	3
	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN
AUTOMOBILES LEQ	60.8	58.9	57.2	51.1	59.7
MEDIUM TRUCKS LEQ	55.3	53.8	47.4	45.9	54.4
HEAVY TRUCKS LEQ		56.2	47.2	48.4	56.8
				= -	
VEHICULAR NOISE	63.3	61.6	58.0	53.8	62.3
	NOISE IMPACTS	WITH TOPO A	ND BARRIER	SHIELDING	
	PK HR LEQ	DAY LEO	EVEN LEO	NIGHT LEQ	LDN
VEHICULAR NOISE	53.7			44.2	
			ш/∩ амет¤	NT	W/ AMRIENT
DV IID I DO MINIOTO	שבתתאת מס ממחשת	D _	63.3	47 J.	63.3
PK HR LEQ WITHOUT				*****	
MIT PK HR LEQ WITH			53.7		62.3
LDN WITHOUT TOPO A		=	62.3	*****	•
MIT LDN WITH TOPO	AND BARRIER	=	52.7		54./

PROJECT: Radio Squ	Ponto Bos	wharea		JOB #:	1512-06-08
		LDara		DATE:	
ROADWAY: De La Vir		-771		BY:	
LOCATION: Unit 214	- Facade (no wa	all)		. 1d	MIKE KOSA
ADT = 13,300			· 	PK HR VOL =	1,330
SPEED = 25					
PK HR % = 10					
CTL DIST= 48					
DIST N/F= 24			AUTO SLE	DISTANCE =	49.49
DT WALL= 48			MED TRUCK	SLE DIST=	48.75
DT W/OB= 0			HVY TRUCK	SLE DIST=	47.34
HTH WALL= 0.0	*****				
OBS HTH= 1.7.0					
AMBIENT= 0.0					
ROADWAY VIEW:	T.E ANGT.E9	n			
KOADWAI VIEW:	RT ANGLE= 9				
	DF ANGLE= 18				
SITE CONDITIONS (1		=SOFT SITE)			
AUTOMOBILES =	10				
	10			USTMENT=	
HEAVY TRUCKS =	10		(ADJUSTME	NT TO HEAVY	TRUCKS)
BARRIER = 1	. (0=WALL,1=BERM)			
PAD EL = 0.0				BILES =	
ROAD EL = 0.0			EL MEDIUM	TRUCKS=	2.3
GRADE = 0.1	₽		EL HEAVY	TRUCKS =	8.0
VEHICLE TYPE		DAY	EVENING	NIGHT	DAILY
AUTOMOBILES		0.775	0.129	0.096	0.9742
MEDIUM TRUCKS		0.848	0.049	0.103	0.0184
HEAVY TRUCKS		0.865		0.108	
				DD GUTTY DIAM	
	NOISE IMPACTS	MITHOUT TOP	O OR BARRI	EK SHIEDDIM	٠
	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN
AUTOMOBILES LEQ	61.3	59.4	57.6	51.5	60.2
MEDIUM TRUCKS LEQ	55.7	54.2	47.9	46.3	54.8
HEAVY TRUCKS LEQ	58.1	56.6	47.6	48.8	57.2
VEHICULAR NOISE	63.7	62.0	58.4	54.2	62.7
ANTITOON HOTOR	43. 7	32.0	20.1	3.1.2	
	NOISE IMPACTS	WITH TOPO A	ND BARRIER	SHIELDING	
	PK HR LEQ				
VEHICULAR NOISE	63.7	62.0	58.4	54.2	62.7
			W/O AMBIE	NT	W/ AMBIENT
PK HR LEQ WITHOUT	TOPO OR BARRIER		63.7		, 63.7
MIT PK HR LEQ WITH				*****	
LDN WITHOUT TOPO A			62.7		62.7
MIT LDN WITH TOPO A				****	
י ספסד חודא מיייד דייי	WITTHUL DAKKING	-	04.7		

PROJECT: Radio Sq	uare - Santa Ba:	rbara		JOB #:	1512-06-08
ROADWAY: Carrillo				DATE:	15-Sep-06
LOCATION: Unit 311	- Balcony (no s	wall)		BY:	-
MOCHION, OHIE SEE	Daisony (220	,			
ADT = 35,400				PK HR VOL =	3,540
SPEED = 30					
PK HR % = 10					
CTL DIST= 55					
DIST N/F= 36			AUTO SLE	DISTANCE =	59.51
DT WALL= 50			MED TRUCK	SLE DIST=	58.43
DT W/OB= 5			HVY TRUCK	SLE DIST=	56.05
HTH WALL= 0.0	*****				
OBS HTH= 29.0					
AMBIENT= 0.0					
ROADWAY VIEW:	LF ANGLE= -9	0			
	RT ANGLE= 9	0			
	DF ANGLE= 18	10			
SITE CONDITIONS (1	0=HARD SITE, 15	=SOFT SITE)			
AUTOMOBILES =	10				
MEDIUM TRUCKS =	10		GRADE ADJ	USTMENT=	0.00
HEAVY TRUCKS =	10			NT TO HEAVY	_
	_ (0=WALL,1=BERM	1)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
PAD EL = 0.0	. (V-M1122), I-DD101	.,	EL AUTOMÓ	BILES =	0.0
ROAD EL = 0.0				TRUCKS=	2.3
	Q.			TRUCKS =	8.0
GRADE = 0.1	ъ		1913 HERVI	inocho –	0.0
VEHICLE TYPE		DAY	EVENING	NIGHT	DAILY
AUTOMOBILES		0.775	0.129	0.096	0.9742
MEDIUM TRUCKS		0.848	0.049	0.103	0.0184
HEAVY TRUCKS		0.865	0.027	0.108	0.0074
	NOISE IMPACTS	WITHOUT TOP	O OR BARRI	ER SHIELDING	<u> </u>
	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN
AUTOMOBILES LEQ	-	65.1	63.3	57.3	65.9
MEDIUM TRUCKS LEQ					59.5
HEAVY TRUCKS LEQ	62.3		51.8	53.1	61.4
VEHICULAR NOISE	68.9	67.2	63.9	59.4	67.9
	NOISE IMPACTS	WITH TOPO A	ND BARRIER	SHIELDING	
	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN
VEHICULAR NOISE	68.9				
			W/O AMBIE	NT	W/ AMBIENT
PK HR LEQ WITHOUT	TOPO OR BARRIER		68.9		68.9
MIT PK HR LEQ WITH				*****	
LDN WITHOUT TOPO A			67.9		67.9

MIT LDN WITH TOPO	WIND DWKKTRK	=	υ/.9		31.3

PROJECT: Radio Sq	uare - Santa Barba			JOB #:	1512-06-08
ROADWAY: Carrillo					15-Sep-06
LOCATION: Unit 311)			Mike Rosa
HOCATION: UNIC 311	Darcony (w) warr	,			
ADT = 35,400		··		PK HR VOL =	3,540
SPEED = 30					
PK HR % = 10					
CTL DIST= 55					
DIST N/F= 36			AUTO SLE	DISTANCE =	59.50
DT WALL= 50			MED TRUCK	SLE DIST=	58.36
DT W/OB= 5			HVY TRUCK	SLE DIST=	55.85
HTH WALL= 28.0	(4.0' wall)				
OBS HTH= 29.0					
AMBIENT= 0.0					
ROADWAY VIEW:	LF ANGLE= -90				
ROMANIE VIEW	RT ANGLE= 90				
	DF ANGLE= 180				
SITE CONDITIONS (1		לאידופ ייק(
AUTOMOBILES =)			
			CDADE ADT	USTMENT=	0.00
MEDIUM TRUCKS =				NT TO HEAVY	
HEAVY TRUCKS =			(ADJUSTME.	NI IO HEAVI	IRUCKS/
BARRIER = 1	(0=WALL,1=BERM)			DTI 00	0.0
PAD EL = 0.0				BILES =	
ROAD EL = 0.0				TRUCKS=	2.3
GRADE = 0.1	8		EL HEAVY	TRUCKS =	8.0
VEHICLE TYPE		DAY	EVENING	NIGHT	DAILY
AUTOMOBILES		0.775	0.129	0.096	0.9742
MEDIUM TRUCKS			0.049		
		0.865		0.108	
HEAVY TRUCKS		0.005	0.027	01250	
	MOTER TURN CERC LITE	TY OTHER DOD	O OD BADDI	ED CHIELDIN	<u> </u>
	NOISE IMPACTS WIT	HOUT TOP	O OR BARRI	ek sureman.	G
•	PK HR LEQ E	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN
AUTOMOBILES LEQ	67.0	65.1	63.3	57.3	65.9
MEDIUM TRUCKS LEQ	60.4	58.9	52.6	51.0	59.5
HEAVY TRUCKS LEQ			51.9	53.1	61.5
VEHICULAR NOISE	68.9	67.2	63.9	59.4	67.9
VEHICUDAK NOISE	00.7	07.2	05.5	22.4	.
	NOISE IMPACTS WIT	TOPO A	ND BARRIER	SHIELDING	

	PK HR LEQ I				
VEHICULAR NOISE	59.4	57.6	54.4	49.8	58.3
			W/O AMBIE	NT	W/ AMBIENT
PK HR LEQ WITHOUT	TOPO OR BARRIER	=	68.9		68.9
MIT PK HR LEQ WITH			59.4	*****	
LDN WITHOUT TOPO A		=	67.9		67.9
MIT LDN WITH TOPO A		- ±	58.3		
MIT PON WITH TOPO	MNU DARRIER =	-	20.2		55.5

PROJECT: Radio Squ	uare - Santa Barba:	ra	<u> </u>	JOB #:	1512-06-08
ROADWAY: Carrillo	lare - Banca Barbar	La			15-Sep-06
LOCATION: Unit 311	- France (no wall)	١			Mike Rosa
LOCATION: DILL 311	- racade (110 wall)	,			
ADT = 35,400			· <u>-</u>	PK HR VOL =	3,540
SPEED = 30					
PK HR % = 10					
CTL DIST= 50					
DIST N/F= 36			AUTO SLE	DISTANCE =	54.93
DT WALL= 50			MED TRUCK	SLE DIST=	53.75
DT W/OB= 0			HVY TRUCK	SLE DIST=	51.15
HTH WALL= 0.0	*****				
OBS HTH= 29.0					
AMBIENT= 0.0					
ROADWAY VIEW:	T.F ANGT.E= -90				
ROADWAI VIEW:	RT ANGLE= 90				
	DF ANGLE= 180				
came companions /1		ושיינט יים			
SITE CONDITIONS (1		LI OTIE!			
AUTOMOBILES =					0.00
MEDIUM TRUCKS =	10			USTMENT=	
HEAVY TRUCKS =	10		(ADJUSTME	NT TO HEAVY	TRUCKS)
	. (0=WALL,1=BERM)				
PAD EL = 0.0				BILES =	0.0
ROAD EL = 0.0				TRUCKS=	
GRADE = 0.1	8		EL HEAVY	TRUCKS =	8.0
VEHICLE TYPE		DAY	EVENING	NIGHT	DAILY
AUTOMOBILES		0.775	0.129	0.096	0.9742
MEDIUM TRUCKS		0.848	0.049	0.103	0.0184
HEAVY TRUCKS		0.865	0.027	0.108	0.0074
	NOISE IMPACTS WIT	HOUT TOP	O OR BARRI	ER SHIELDIN	G
	PK HR LEO D	AY LEO	EVEN LEQ	NIGHT LEQ	LDN
AUTOMOBILES LEQ	67.3				66.2
MEDIUM TRUCKS LEQ				51.4	59.8
HEAVY TRUCKS LEQ	62.7				61.8
			·	·	
VEHICULAR NOISE	69.3	67.5	64.3	59.7	68.3
	NOISE IMPACTS WIT	H TOPO A	ND BARRIEF	SHIELDING	
	PK HR LEQ D				
VEHICULAR NOISE	69.3	67.5	64.3	59.7	68.3
			W/O AMBIE	INT	W/ AMBIENT
PK HR LEO WITHOUT	TOPO OR BARRIER	=	69.3		69.3
MIT PK HR LEQ WITH			69.3	*****	
LDN WITHOUT TOPO A			68.3		68.3
MIT LDN WITH TOPO		- -	68.3		
MIT TON WITH TOPO	WIND BUKKTEK =	:	00.3		٠.٠٠

NOISE LEVEL ADDITION (dBA)

Unit 311 (Residential) - Roadways + Ralph's Mechanical/Truck Deliveries

Balcony (unmitigated)

Street Name	Noise Level (dBA)	10^dBA/10
De La Vina	60.4	1,096,478.2
Carrillo	67.9	6,165,950.0
Combined Noise Lev	el(dBA) = 68.6	7,262,428.2

Balcony (mitigated)

Street Name	Noise Level (dBA)	10^dBA/10
De La Vina	52.0	158,489.3
Carrillo	58.3	676,083.0
Combined Noise Lev	el (dBA) = 59.2	834,572.3

at Facade (unmitigated)		
Street Name	Noise Level (dBA)	10^dBA/10
De La Vina	60.7	1,174,897.6
Carrillo	68.3	6,760,829.8
Combined Noise Leve	i(dBA)	7,935,727.3

PROJECT: Radio Son	uare - Santa Barbara			JOB #:	1512-06-08
ROADWAY: De La Vi				DATE:	15-Sep-06
	- Balcony (no wall)			BY:	Mike Rosa
20011120111 01111 1111	, , , ,				
ADT = 13,300				PK HR VOL =	1,330
SPEED = 25					
PK HR % = 10					
CTL DIST= 80					
DIST N/F= 24			AUTO SLE	DISTANCE =	82.66
DT WALL= 75			MED TRUCK	SLE DIST=	82.02
DT W/OB= 5			HVY TRUCK	SLE DIST=	80.69
HTH WALL= 0.0	*****				
OBS HTH= 24.0					
AMBIENT= 0.0					
ROADWAY VIEW:	LF ANGLE= -90				
HOMBINIT VIII.	RT ANGLE= 90				
	DF ANGLE= 180				
STTR CONDITTIONS (1	0=HARD SITE, 15=SOF	r SITE)			
AUTOMOBILES =	10				
			CDADE ADT	USTMENT=	0.00
MEDIUM TRUCKS =					
HEAVY TRUCKS =			(ADJUSTME	NT TO HEAVY	IRUCAS
	(0=WALL,1=BERM)			DTT 00	0.0
PAD EL = 0.0				BILES =	-
ROAD EL = 0.0				TRUCKS=	2.3
GRADE = 0.1	8		EL HEAVY	TRUCKS =	8.0
VEHICLE TYPE		DAY	EVENING	NIGHT	DAILY
AMILCHO III					
AUTOMOBILES		0.775	0.129	0.096	0.9742
MEDIUM TRUCKS		0.848	0.049	0.103	0.0184
HEAVY TRUCKS		0.865	0.027	0.108	0.0074
	NOISE IMPACTS WITH	OTT TOP	O OR BARRI	ER SHIELDIN	······································
	MOTUR INFLICTO WITH	001 101	On Bi		
	PK HR LEQ DA	Y LEQ	EVEN LEQ	NIGHT LEQ	LDN
AUTOMOBILES LEQ	59.0	57.1	55.4	49.3	57.9
MEDIUM TRUCKS LEQ	53.5	52.0	45.6	44.1	52.5
HEAVY TRUCKS LEQ	55.7	54.3	45,3	46.5	54.9
			56.2	51.9	60.4
VEHICULAR NOISE	61.5	59.7	56.2	21.3	60.4
	NOISE IMPACTS WITH	TOPO A	ND BARRIEF	SHIELDING	
				NIGHT LEQ	LDM
VEHICULAR NOISE	61.5	59.7	56.2	51.9	60.4
			W/O AMBIE	NT.	W/ AMBIENT
D. 110	שמתאת כם האחשים		61.5	***	61.5
	TOPO OR BARRIER =			****	
	I TOPO AND BARRIER =		61.5		60.4
LDN WITHOUT TOPO A			60.4	****	
MIT LDN WITH TOPO	AND BARRIER =		60.4	****	* 60.4

PROJECT: Radio Squ	uare - Santa	Barbara			1512-06-08
ROADWAY: De La Vir				DATE:	15-Sep-06
LOCATION: Unit 311		v/wall)		BY:	Mike Rosa
ADT = 13,300			 	PK HR VOL =	1,330
SPEED = 25					-•
PK HR % = 10					
CTL DIST= 80					
DIST N/F= 24			AUTO SLE I	DISTANCE =	84.25
DIST N/F= 24 DT WALL= 75				SLE DIST=	
DT W/OB= 5				SLE DIST=	
HTH WALL= 28.0	(4 0! wall)		2272 2110 011		
OBS HTH= 29.0	(4.0 wall)				
-					
AMBIENT= 0.0	TE ANGLE	0.0			
ROADWAY VIEW:					
	RT ANGLE=				
	DF ANGLE=				
SITE CONDITIONS (1		TOMBORI SITE)			
AUTOMOBILES =	10				0.00
MEDIUM TRUCKS =				USTMENT=	
HEAVY TRUCKS =			(ADJUSTME	NT TO HEAVY	TRUCKS)
	(0=WALL,1=B	ERM)			
PAD EL = 0.0				BILES =	0.0
ROAD EL = 0.0				TRUCKS=	2.3
GRADE = 0.1	*		EL HEAVY	TRUCKS =	8.0
VEHICLE TYPE		DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	· <u> </u>	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS		0.848	0.049	0.103	0.0184
HEAVY TRUCKS		0.865	0.027	0.108	0.0074
	NOISE IMPAC	TS WITHOUT TOP	O OR BARRI	ER SHIELDIN	G
	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN
AUTOMOBILES LEQ	58.9	57.0	55.3	49.2	57.8
MEDIUM TRUCKS LEQ	53.4		45.5		
HEAVY TRUCKS LEQ	55.7	54.3	45.2	46.5	54.8
VEHICULAR NOISE	61.4	59.7	56.1	51.8	60.4
	NOISE IMPAC	TS WITH TOPO F	ND BARRIER	SHIELDING	<u></u>
	DE UD TEC	DAY LEQ	EVEN TEO	NIGHT LEO	LDN
VEHICULAR NOISE	PK HR LEQ 53.0			43.5	
			W/O AMBTE	NT	w/ AMBIENT
PK HR LEQ WITHOUT	ממגם פט טמטת	קקד =	61.4		61.4
PK HR LEQ WITHOUT MIT PK HR LEQ WITH			53.0		
			60.4		60.4
LDN WITHOUT TOPO A			52.0	****	
MIT LDN WITH TOPO	WIND DAKKIEK	_	22.0		22.0

PROJECT: Radio Squ	uare - Santa R	arbara		JOB #:	1512-06-08
ROADWAY: De La Vi				DATE:	
LOCATION: Unit 311		wall)		BY:	=
LOCATION: OHIL SIT	- Facade (IIO	wall)		<i>54</i> .	.,2.12
ADT = 13,300				PK HR VOL =	1,330
SPEED = 25					
PK HR % = 10					
CTL DIST= 75					
DIST N/F= 24			AUTO SLE	DISTANCE =	77.83
DT WALL= 75			MED TRUCK	SLE DIST=	77.15
DT W/OB= 0			HVY TRUCK	SLE DIST=	75.74
HTH WALL= 0.0	*****				
OBS HTH= 24.0					
AMBIENT= 0.0					
	LF ANGLE= -	90			
NOTE WILL	RT ANGLE=				
	DF ANGLE= 1				
SITE CONDITIONS (1					
	U=HARD SITE, I	3-80F1 SIIE/			
AUTOMOBILES =					0.00
MEDIUM TRUCKS =	10			USTMENT=	_
HEAVY TRUCKS =	10		(ADJUSTME	NT TO HEAVY	TRUCKS)
BARRIER = 1	. (0=WALL,1=BER	M)			
PAD EL = 0.0				BILES =	0.0
ROAD EL = 0.0			EL MEDIUM	TRUCKS≍	2.3
GRADE = 0.1	ક		EL HEAVY	TRUCKS =	8.0
VEHICLE TYPE		DAY	EVENING	NIGHT	DAILY
		·-			
AUTOMOBILES		0.775			
MEDIUM TRUCKS		0.848		0.103	
HEAVY TRUCKS		0.865	0.027	0.108	0.0074
	NOISE IMPACTS	WITHOUT TOP	O OR BARRI	ER SHIELDIN	G
	PK HR LEO	DAY LEO	EVEN LEO	NIGHT LEQ	LDN
AUTOMOBILES LEQ	59.3	57.4	55.6	49.6	58.2
MEDIUM TRUCKS LEQ				44.3	52.8
HEAVY TRUCKS LEQ	56.0				55.2
HEAVI INOCKE HEQ	30.0				
VEHICULAR NOISE	61.7	60.0	56.4	52.2	60.7
	NOISE IMPACTS	WITH TOPO A	ND BARRIER	SHIELDING	
	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN
VEHICULAR NOISE					
			W/O AMETE	NT	w/ ambtent
DIE IID Y DA GERMINE	MODO OD DADDY		W/O AMBIE 61.7		61.7
PK HR LEQ WITHOUT				*****	
MIT PK HR LEQ WITH					60.7
LDN WITHOUT TOPO A			60.7	*****	
MIT LDN WITH TOPO	AND BARRIER	=	60.7	*****	60.7

NOISE LEVEL ADDITION (dBA)

Unit 314 (Residential) - Roadways + Ralph's Mechanical/Truck Deliveries

balcony (unmitigated)

Street Name	Noise Level (dBA)	10^dBA/10
De La Vina	63.1	2,041,737.9
Ralph's Mech+Truck Del.	59.0	794,328.2
Combined Noise Level (dB)	9 64. 5	2,836,066.2

balcony (mitigated)

Street Name	Noise Level (dBA)	10^dBA/10
De La Vina	53.3	213,796.2
Ralph's Mech+Truck Del.	59.0	794,328.2
Combined Noise Level (dBA	60.0	1,008,124.4

	uare - Santa	Barbara		JOB #:	1512-06-08
ROADWAY: De La Vi				DATE:	15-Sep-06
LOCATION: Unit 314	- Balcony (r	no wall)		BY:	Mike Rosa
	·			PK HR VOL =	1,330
ADT = 13,300				PK HK VOL =	1,550
SPEED = 25					
PK HR % = 10					
CTL DIST= 41			ATTO OTTE	DISTANCE =	45.97
DIST N/F= 24				SLE DIST=	44.81
DT WALL= 36				SLE DIST=	
DT W/OB= 5	*****		HVI IROCK	SUB DIST-	42.54
HTH WALL= 0.0	******				
OBS HTH= 24.0					
AMBIENT= 0.0		0.0			
ROADWAY VIEW:	LF ANGLE=				
	RT ANGLE=				
	DF ANGLE=				
SITE CONDITIONS (1		15=50FT SITE)			
AUTOMOBILES =	10				0.00
INDION INCOM	10		=	USTMENT=	
HEAVY TRUCKS =			(ADJUSTME)	NT TO HEAVY	TRUCKS)
	L (0=WALL,1=B	ERM)			
PAD EL = 0.0				BILES =	0.0
ROAD EL = 0.0				TRUCKS=	2.3
GRADE = 0.1	8		EL HEAVY	TRUCKS =	8.0
VEHICLE TYPE		DAY	Y EVENING	NIGHT	DAILY
AUTOMOBILES		0.775	0.129	0.096	0.9742
MEDIUM TRUCKS		0.848	0.049	0.103	0.0184
CITIO TOLL TICO CICO		0.865		0.108	0.0074
HEAVY TRUCKS					
	NOISE IMPAC	TS WITHOUT TO	PO OR BARRI	ER SHIELDING	<u> </u>
		TS WITHOUT TO			J.DN
HEAVY TRUCKS	PK HR LEQ	TS WITHOUT TOP	EVEN LEQ	NIGHT LEQ	LDN
HEAVY TRUCKS	PK HR LEQ 61.6	TS WITHOUT TOP DAY LEQ 59.7	EVEN LEQ 57.9	NIGHT LEQ 51.9	LDN 60.5
HEAVY TRUCKS AUTOMOBILES LEQ MEDIUM TRUCKS LEQ	PK HR LEQ 61.6 56.1	TS WITHOUT TOP DAY LEQ 59.7 54.6	EVEN LEQ 57.9 48.2	NIGHT LEQ 51.9 46.7	LDN 60.5 55.1
HEAVY TRUCKS AUTOMOBILES LEQ MEDIUM TRUCKS LEQ	PK HR LEQ 61.6	TS WITHOUT TOP DAY LEQ 59.7 54.6	EVEN LEQ 57.9 48.2	NIGHT LEQ 51.9	ЫДЙ 60.5 55.1
HEAVY TRUCKS AUTOMOBILES LEQ MEDIUM TRUCKS LEQ HEAVY TRUCKS LEQ	PK HR LEQ 61.6 56.1	TS WITHOUT TOP DAY LEQ 59.7 54.6	EVEN LEQ 57.9 48.2 48.1	NIGHT LEQ 51.9 46.7 49.3	ЫДЙ 60.5 55.1
	PK HR LEQ 61.6 56.1 58.5	DAY LEQ 59.7 54.6 57.1	EVEN LEQ 57.9 48.2 48.1	NIGHT LEQ 51.9 46.7 49.3	LDN 60.5 55.1 57.7
HEAVY TRUCKS AUTOMOBILES LEQ MEDIUM TRUCKS LEQ HEAVY TRUCKS LEQ	PK HR LEQ 61.6 56.1 58.5 64.1	DAY LEQ 59.7 54.6 57.1 62.4	EVEN LEQ 57.9 48.2 48.1 58.7	NIGHT LEQ 51.9 46.7 49.3 54.6	LDN 60.5 55.1 57.7
HEAVY TRUCKS AUTOMOBILES LEQ MEDIUM TRUCKS LEQ HEAVY TRUCKS LEQ VEHICULAR NOISE	PK HR LEQ 61.6 56.1 58.5 64.1 NOISE IMPAC	DAY LEQ 59.7 54.6 57.1 62.4 TS WITH TOPO A	EVEN LEQ 57.9 48.2 48.1 58.7 AND BARRIER	NIGHT LEQ 51.9 46.7 49.3 54.6 SHIELDING NIGHT LEQ	LDN 60.5 55.1 57.7 63.1
HEAVY TRUCKS AUTOMOBILES LEQ MEDIUM TRUCKS LEQ HEAVY TRUCKS LEQ VEHICULAR NOISE	PK HR LEQ 61.6 56.1 58.5 64.1	DAY LEQ 59.7 54.6 57.1 62.4 TS WITH TOPO A	EVEN LEQ 57.9 48.2 48.1 58.7 AND BARRIER	NIGHT LEQ 51.9 46.7 49.3 54.6	LDN 60.5 55.1 57.7 63.1
HEAVY TRUCKS AUTOMOBILES LEQ MEDIUM TRUCKS LEQ HEAVY TRUCKS LEQ VEHICULAR NOISE	PK HR LEQ 61.6 56.1 58.5 64.1 NOISE IMPAC	DAY LEQ 59.7 54.6 57.1 62.4 TS WITH TOPO A	EVEN LEQ 57.9 48.2 48.1 58.7 AND BARRIER	NIGHT LEQ 51.9 46.7 49.3 54.6 SHIELDING NIGHT LEQ 54.6	LDN 60.5 55.1 57.7 63.1
HEAVY TRUCKS AUTOMOBILES LEQ MEDIUM TRUCKS LEQ HEAVY TRUCKS LEQ VEHICULAR NOISE	PK HR LEQ 61.6 56.1 58.5 64.1 NOISE IMPACE FK HR LEQ 64.1	DAY LEQ 59.7 54.6 57.1 62.4 TS WITH TOPO A 62.4	EVEN LEQ 57.9 48.2 48.1 58.7 AND BARRIER EVEN LEQ 58.7	NIGHT LEQ 51.9 46.7 49.3 54.6 SHIELDING NIGHT LEQ 54.6	LDN 60.5 55.1 57.7 63.1 LDN 63.1
AUTOMOBILES LEQ MEDIUM TRUCKS LEQ HEAVY TRUCKS LEQ VEHICULAR NOISE VEHICULAR NOISE	PK HR LEQ 61.6 56.1 58.5 64.1 NOISE IMPACE PK HR LEQ 64.1 TOPO OR BARR	DAY LEQ 59.7 54.6 57.1 62.4 TS WITH TOPO 1 DAY LEQ 62.4	EVEN LEQ 57.9 48.2 48.1 58.7 AND BARRIER EVEN LEQ 58.7 W/O AMBIE	NIGHT LEQ 51.9 46.7 49.3 54.6 SHIELDING NIGHT LEQ 54.6	LDN 60.5 55.1 57.7 63.1 LDN 63.1 W/ AMBIENT 64.1
HEAVY TRUCKS AUTOMOBILES LEQ MEDIUM TRUCKS LEQ HEAVY TRUCKS LEQ	PK HR LEQ 61.6 56.1 58.5 64.1 NOISE IMPACT PK HR LEQ 64.1 TOPO OR BARR	DAY LEQ 59.7 54.6 57.1 62.4 TS WITH TOPO 1 DAY LEQ 62.4	EVEN LEQ 57.9 48.2 48.1 58.7 AND BARRIER EVEN LEQ 58.7 W/O AMBIE 64.1	NIGHT LEQ 51.9 46.7 49.3 54.6 SHIELDING NIGHT LEQ 54.6	LDN 60.5 55.1 57.7 63.1 LDN 63.1 W/ AMBIENT 64.1

PROJECT: Radio Sq	uare - Santa B	arbara		JOB #:	
ROADWAY: De La Vi	na			DATE:	15-Sep-06
LOCATION: Unit 314	- Balcony (w/	wall)		BY:	Mike Rosa
ADT = 13,300	·	<u> </u>	.,	PK HR VOL =	1,330
SPEED = 25					
PK HR % = 10					
CTL DIST= 41					
DIST N/F= 24			AUTO SLE	DISTANCE =	46.10
DT WALL= 36			MED TRUCK	SLE DIST=	44.85
DT W/OB= 5			HVY TRUCK	SLE DIST=	42.20
HTH WALL= 23.0	(4.0' wall)				
OBS HTH= 24.0					
AMBIENT= 0.0					
ROADWAY VIEW:	LF ANGLE=	-90			
	RT ANGLE=	90			
	DF ANGLE=	180			
SITE CONDITIONS (1	0=HARD SITE, 1	5=SOFT SITE)			
AUTOMOBILES =	1.0				
MEDIUM TRUCKS =	10		GRADE ADJ	USTMENT=	0.00
HEAVY TRUCKS =	10	:	(ADJUSTME	NT TO HEAVY	TRUCKS)
BARRIER =	L (0=WALL,1=BEF	(MS			
PAD EL = 0.0			EL AUTOMO	BILES =	0.0
ROAD EL = 0.0			EL MEDIUM	TRUCKS=	2.3
GRADE = 0.1	8		EL HEAVY	TRUCKS =	8.0
VEHICLE TYPE		DAY	EVENING	NIGHT	DAILY
			<u> </u>		
AUTOMOBILES		0.775	0.129		
MEDIUM TRUCKS		0.848			
HEAVY TRUCKS		0.865	0.027	0.108	0.0074
	NOISE IMPACTS	S WITHOUT TOP	O OR BARRI	ER SHIELDIN	<u> </u>
	PK HR LEO	DAY TEO	EVEN LEO	NIGHT LEQ	LDN
AUTOMOBILES LEQ	61.6	59.7	57.9	51.8	60.5
MEDIUM TRUCKS LEQ	56.1	54.6		46.7	
HEAVY TRUCKS LEQ	58.6	57.1			
VEHICULAR NOISE	64.1	62.4	58.7	54.6	63.1
	NOISE IMPACTS	WITH TOPO A	ND BARRIER	SHIELDING	
	PK HR LEQ	DAY LEO	EVEN LEO	NIGHT LEQ	LDN
VEHICULAR NOISE	54.3			44.7	53.3
			W/O AMBIE	NT	W/ AMBIENT
PK HR LEQ WITHOUT	TOPO OR BARRII	ER =	64.1		64.1
MIT PK HR LEO WITH			54.2	*****	54.2
LDN WITHOUT TOPO A		=	63.1		63.1
MIT LDN WITH TOPO		=	53.3	*****	53.3

PROJECT: Radio Sq	uare - Santa Ba	arbara	·	JOB #:	1512-06-08
ROADWAY: De La Vi:				DATE:	15-Sep-06
LOCATION: Unit 314		vall)		BY:	Mike Rosa
ADT = 13,300				PK HR VOL =	1,330
SPEED = 25					
PK HR % = 10					
CTL DIST= 36					
DIST N/F= 24			AUTO SLE I	DISTANCE =	41.57
DT WALL= 36			MED TRUCK	SLE DIST=	40.29
DT W/OB= 0			HVY TRUCK	SLE DIST=	37.52
HTH WALL= 0.0	*****				
OBS HTH= 24.0					
AMBIENT= 0.0					
ROADWAY VIEW:	LF ANGLE= -	90			
	RT ANGLE=				
	DF ANGLE= 1				
SITE CONDITIONS (1	0=HARD SITE, 1	5=SOFT SITE)			
	10				
MEDIUM TRUCKS =			GRADE ADJI	USTMENT=	0.00
HEAVY TRUCKS =				NT TO HEAVY	
BARRIER = 1			(120001112		·
PAD EL = 0.0	. (U=MADD, 1+DEM	147	ET. ATTOMO	BILES =	0.0
				TRUCKS=	2.3
ROAD EL = 0.0	0.			TRUCKS =	8.0
GRADE = 0.1	***		BL HERVI	inocias –	5.0
VEHICLE TYPE		DAY	EVENING	NIGHT	DAILY
, ,					
AUTOMOBILES		0.775	0.129	0.096	0.9742
MEDIUM TRUCKS		0.848	0.049	0.103	0.0184
HEAVY TRUCKS		0.865	0.027	0.108	0.0074
	NOISE IMPACTS	WITHOUT TOP	O OR BARRI	ER SHIELDIN	G
	PK HR LEQ	DAY TEO	EVENT T.EO	NIGHT LEQ	LDN
	62.0	60.1		52.3	60.9
AUTOMOBILES LEQ	•	55.1	48.7	47.1	
MEDIUM TRUCKS LEQ	56.6	57.6			
HEAVY TRUCKS LEQ	59.1	57.0	40.0	49.9	50.2
VEHICULAR NOISE	64.5	62.9	59.2	55.0	63.5
V211200=21 3.015=					
	NOISE IMPACTS	WITH TOPO A	ND BARRIER	SHIELDING	
				NT CITE T 100	T DN
	PK HR LEQ			NIGHT LEQ	LDN
VEHICULAR NOISE	64.5	62.9	59.2	55.0	63.5
			W/A METE	NTT	W/ AMBIENT
	mono on F	D	W/O AMBIE	IN I	W/ AMBIENI 64.5
PK HR LEQ WITHOUT			64.5	*****	
MIT PK HR LEQ WITH			64.5		63.5
LDN WITHOUT TOPO A		=	63.5	****	
MIT LDN WITH TOPO	AND BARRIER	=	63.5	0048487	03.5

PROJECT: Radio Sq	uare - Santa	Barbara		JOB #:	1512-06-08
ROADWAY: Carrillo				DATE:	15-Sep-06
LOCATION: Unit 404		no wall)			Mike Rosa
	•				
ADT = 35,400				PK HR VOL =	3,540
SPEED = 30					
PK HR % = 10					
CTL DIST= 53					
DIST N/F= 36			AUTO SLE	DISTANCE =	63.91
DT WALL= 48			MED TRUCK	SLE DIST=	62.50
DT W/OB= 5			HVY TRUCK	SLE DIST=	59.23
HTH WALL= 0.0	******				
OBS HTH= 40.0					
AMBIENT= 0.0					
	LF ANGLE=	-90			
	RT ANGLE=				
	DF ANGLE=				
SITE CONDITIONS (1					
AUTOMOBILES =	1.0				
			CDART ART	TTOWNSMIT	0.00
MEDIUM TRUCKS =	10		-	USTMENT=	
HEAVY TRUCKS =			(ADJUSTME	NT TO HEAVY	TRUCKS
BARRIER =	L (0=WALL,1=E	BERM)			
PAD EL = 0.0				BILES =	0.0
ROAD EL = 0.0				TRUCKS=	2.3
GRADE = 0.1	8		EL HEAVY	TRUCKS =	8.0
VEHICLE TYPE		DAY	Y EVENING	NIGHT	DAILY
· Direction					· · ·
AUTOMOBILES		0.775	0.129	0.096	0.9742
MEDIUM TRUCKS		0.848	0.049	0.103	0.0184
HEAVY TRUCKS		0.865	0.027	0.108	0.0074
				<u>. </u>	
	NOISE IMPAC	CTS WITHOUT TOP	O OR BARRI	ER SHIELDIN	G
	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN
AUTOMOBILES LEQ	66.7	64.8	63.0	57.0	65.6
MEDIUM TRUCKS LEQ	60.1	58.6	52.3	50.7	59.2
HEAVY TRUCKS LEQ	62.1	60.6	51.6	52.9	61.2
VEHICULAR NOISE	68.6	66.9	63.6	59.1	67.6
APHICONAK NOTRE	00.0	66.9	0.00	_	
	NOISE IMPAG	CTS WITH TOPO A		<u>, w-</u>	
	PK HR LEQ			NIGHT LEQ	LDN
VEHICULAR NOISE	68.6	66.9	63.6	59.1	67.6
			W/O AMBIE	NT	W/ AMBIENT
PK HR LEQ WITHOUT	יים ביו אר מיים	RTER =	68.6		68.6
MIT PK HR LEQ WITH			68.6	*****	
					67.6
LDN WITHOUT TOPO A			67.6	*****	
MIT LDN WITH TOPO	AND BARRIER	=	67.6		0/.0

	uare - Santa B	arbara			1512-06-08
ROADWAY: Carrillo					15-Sep-06
LOCATION: Unit 404	- Balcony (w/	wall)		BY:	Mike Rosa
ADT = 35,400			****	PK HR VOL =	3,540
SPEED = 30					
PK HR % = 10					
CTL DIST= 53					
DIST N/F= 36				DISTANCE =	
DT WALL= 48				SLE DIST=	
DT W/OB= 5			HVY TRUCK	SLE DIST=	58.97
HTH WALL= 37.5	(2.5')				
OBS HTH= 40.0					
AMBIENT= 0.0					
ROADWAY VIEW:	LF ANGLE=	-90			
	RT ANGLE=	90			
	DF ANGLE=				
SITE CONDITIONS (1	0=HARD SITE, 1	.5=SOFT SITE)			
AUTOMOBILES =	10				
MEDIUM TRUCKS =	10		GRADE ADJI		0.00
HEAVY TRUCKS =			(ADJUSTME)	TO HEAVY	TRUCKS)
BARRIER = 1	L (0=WALL,1=BER	em)			
PAD EL = 0.0			EL AUTOMO		0.0
ROAD EL = 0.0			EL MEDIUM		2.3
GRADE = 0.1	육		EL HEAVY	TRUCKS =	8.0
VEHICLE TYPE		DAY	EVENING	NIGHT	DAILY
ALTHOMODET EG		0.775	0 129	0.096	0.9742
AUTOMOBILES		0.775			
MEDIUM TRUCKS		0.848	0.049	0.103	0.0184
			0.049	0.103	0.0184
MEDIUM TRUCKS	NOISE IMPACTS	0.848 0.865	0.049 0.027	0.103 0.108	0.0184 0.0074
MEDIUM TRUCKS	NOISE IMPACTS	0.848 0.865 WITHOUT TOP	0.049 0.027 O OR BARRI	0.103 0.108	0.0184 0.0074
MEDIUM TRUCKS		0.848 0.865 WITHOUT TOP	0.049 0.027 O OR BARRI	0.103 0.108 ER SHIELDING	0.0184 0.0074
MEDIUM TRUCKS HEAVY TRUCKS	PK HR LEQ	0.848 0.865 S WITHOUT TOP	0.049 0.027 O OR BARRI EVEN LEQ	0.103 0.108 ER SHIELDING	0.0184 0.0074 G
MEDIUM TRUCKS HEAVY TRUCKS AUTOMOBILES LEQ	PK HR LEQ 66.7	0.848 0.865 S WITHOUT TOP DAY LEQ 64.8	0.049 0.027 O OR BARRI EVEN LEQ 63.0 52.3	0.103 0.108 ER SHIELDING NIGHT LEQ 57.0 50.7	0.0184 0.0074 G LDN 65.6 59.2
MEDIUM TRUCKS HEAVY TRUCKS AUTOMOBILES LEQ MEDIUM TRUCKS LEQ	PK HR LEQ 66.7 60.1	0.848 0.865 S WITHOUT TOP DAY LEQ 64.8 58.6	0.049 0.027 O OR BARRI EVEN LEQ 63.0 52.3	0.103 0.108 ER SHIELDING NIGHT LEQ 57.0 50.7	0.0184 0.0074 G LDN 65.6 59.2
MEDIUM TRUCKS HEAVY TRUCKS AUTOMOBILES LEQ MEDIUM TRUCKS LEQ HEAVY TRUCKS LEQ	PK HR LEQ 66.7 60.1 62.1	0.848 0.865 S WITHOUT TOP DAY LEQ 64.8 58.6 60.7	0.049 0.027 O OR BARRI EVEN LEQ 63.0 52.3 51.6	0.103 0.108 ER SHIELDING NIGHT LEQ 57.0 50.7 52.9	0.0184 0.0074 G LDN 65.6 59.2 61.2
MEDIUM TRUCKS HEAVY TRUCKS AUTOMOBILES LEQ MEDIUM TRUCKS LEQ HEAVY TRUCKS LEQ	PK HR LEQ 66.7 60.1 62.1 68.6	0.848 0.865 WITHOUT TOP DAY LEQ 64.8 58.6 60.7 66.9	0.049 0.027 O OR BARRI EVEN LEQ 63.0 52.3 51.6	0.103 0.108 ER SHIELDING	0.0184 0.0074 G LDN 65.6 59.2 61.2
MEDIUM TRUCKS HEAVY TRUCKS AUTOMOBILES LEQ MEDIUM TRUCKS LEQ HEAVY TRUCKS LEQ VEHICULAR NOISE	PK HR LEQ 66.7 60.1 62.1 68.6 NOISE IMPACTS	0.848 0.865 S WITHOUT TOP DAY LEQ 64.8 58.6 60.7 66.9 E WITH TOPO A	0.049 0.027 O OR BARRI EVEN LEQ 63.0 52.3 51.6 63.7 ND BARRIER	0.103 0.108 ER SHIELDING NIGHT LEQ 57.0 50.7 52.9 59.1 SHIELDING NIGHT LEQ	0.0184 0.0074 G LDN 65.6 59.2 61.2
MEDIUM TRUCKS HEAVY TRUCKS AUTOMOBILES LEQ MEDIUM TRUCKS LEQ HEAVY TRUCKS LEQ	PK HR LEQ 66.7 60.1 62.1 68.6	0.848 0.865 WITHOUT TOP DAY LEQ 64.8 58.6 60.7 66.9	0.049 0.027 O OR BARRI EVEN LEQ 63.0 52.3 51.6 63.7 ND BARRIER	0.103 0.108 ER SHIELDING NIGHT LEQ 57.0 50.7 52.9 59.1 SHIELDING NIGHT LEQ	0.0184 0.0074 G LDN 65.6 59.2 61.2
MEDIUM TRUCKS HEAVY TRUCKS AUTOMOBILES LEQ MEDIUM TRUCKS LEQ HEAVY TRUCKS LEQ VEHICULAR NOISE	PK HR LEQ 66.7 60.1 62.1 68.6 NOISE IMPACTS	0.848 0.865 S WITHOUT TOP DAY LEQ 64.8 58.6 60.7 66.9 E WITH TOPO A	0.049 0.027 O OR BARRI EVEN LEQ 63.0 52.3 51.6 63.7 ND BARRIER	0.103 0.108 ER SHIELDING NIGHT LEQ 57.0 50.7 52.9 59.1 SHIELDING NIGHT LEQ 50.4	0.0184 0.0074 G LDN 65.6 59.2 61.2
MEDIUM TRUCKS HEAVY TRUCKS AUTOMOBILES LEQ MEDIUM TRUCKS LEQ HEAVY TRUCKS LEQ VEHICULAR NOISE	PK HR LEQ 66.7 60.1 62.1 68.6 NOISE IMPACTS	0.848 0.865 WITHOUT TOP DAY LEQ 64.8 58.6 60.7 66.9 E WITH TOPO A	0.049 0.027 O OR BARRI EVEN LEQ 63.0 52.3 51.6 63.7 ND BARRIER EVEN LEQ 55.0	0.103 0.108 ER SHIELDING NIGHT LEQ 57.0 50.7 52.9 59.1 SHIELDING NIGHT LEQ 50.4	0.0184 0.0074 G LDN 65.6 59.2 61.2 67.6
MEDIUM TRUCKS HEAVY TRUCKS AUTOMOBILES LEQ MEDIUM TRUCKS LEQ HEAVY TRUCKS LEQ VEHICULAR NOISE VEHICULAR NOISE PK HR LEQ WITHOUT	PK HR LEQ 66.7 60.1 62.1 68.6 NOISE IMPACTS PK HR LEQ 60.0	0.848 0.865 WITHOUT TOP DAY LEQ 64.8 58.6 60.7 66.9 EWITH TOPO A DAY LEQ 58.2	0.049 0.027 O OR BARRI EVEN LEQ 63.0 52.3 51.6 63.7 ND BARRIER EVEN LEQ 55.0	0.103 0.108 ER SHIELDING NIGHT LEQ 57.0 50.7 52.9 59.1 SHIELDING NIGHT LEQ 50.4	0.0184 0.0074 G LDN 65.6 59.2 61.2 67.6 LDN 58.9 W/ AMBIENT 68.6
MEDIUM TRUCKS HEAVY TRUCKS AUTOMOBILES LEQ MEDIUM TRUCKS LEQ HEAVY TRUCKS LEQ VEHICULAR NOISE	PK HR LEQ 66.7 60.1 62.1 68.6 NOISE IMPACTS PK HR LEQ 60.0 TOPO OR BARRIE	0.848 0.865 WITHOUT TOP DAY LEQ 64.8 58.6 60.7 66.9 EWITH TOPO A DAY LEQ 58.2	0.049 0.027 O OR BARRI EVEN LEQ 63.0 52.3 51.6 63.7 ND BARRIER EVEN LEQ 55.0 W/O AMBIE 68.6	0.103 0.108 ER SHIELDING NIGHT LEQ 57.0 50.7 52.9 59.1 SHIELDING NIGHT LEQ 50.4	0.0184 0.0074 G LDN 65.6 59.2 61.2 67.6 LDN 58.9 W/ AMBIENT 68.6

PROJECT: Radio Sq	uare - Santa Ba	arbara		JOB #:	1512-06-08
ROADWAY: Carrillo				DATE:	15-Sep-06
LOCATION: Unit 404		vall)		BY:	Mike Rosa
		•			
ADT = 35,400				PK HR VOL =	3,540
SPEED = 30					
PK HR % = 10					
CTL DIST= 62					
DIST N/F= 36			AUTO SLE I	DISTANCE =	
DT WALL= 48				SLE DIST=	
DT W/OB= 14			HVY TRUCK	SLE DIST=	67.40
HTH WALL= 0.0	******				
OBS HTH= 40.0					
AMBIENT= 0.0					
ROADWAY VIEW:	LF ANGLE= -	90			
	RT ANGLE=	90			
	DF ANGLE= 1				
SITE CONDITIONS (1	0=HARD SITE, 1	5=SOFT SITE)			
AUTOMOBILES =	10				
MEDIUM TRUCKS =	10		GRADE ADJ	JSTMENT=	0.00
HEAVY TRUCKS =	10		(ADJUSTME)	NT TO HEAVY	TRUCKS)
BARRIER =	L (0=WALL,1=BER	M)			
PAD EL = 0.0			EL AUTOMO	BILES =	0.0
ROAD EL = 0.0			EL MEDIUM	TRUCKS=	2.3
GRADE = 0.1	용		EL HEAVY	TRUCKS =	8.0
VEHICLE TYPE		DAY	EVENING	NIGHT	DAILY
AUTOMOBILES		0.775	0.129	0.096	0.9742
MEDIUM TRUCKS			0.049		0.0184
HEAVY TRUCKS			0.027		
HEAVI IROCKS					
	NOISE IMPACTS	WITHOUT TOP	O OR BARRI	ER SHIELDIN	G
	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN
AUTOMOBILES LEQ	66.2	64.3	62.5	56.5	65.1
MEDIUM TRUCKS LEQ	59.6	58.1	51.8	50.2	58.7
HEAVY TRUCKS LEQ	61.5	60.1	51.0	52.3	60.6
	60.3	66.4	63.1	58.6	67.1
VEHICULAR NOISE	68.1	60.4	03.1	30.0	
	NOISE IMPACTS	WITH TOPO A	ND BARRIER	SHIELDING	
	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN
VEHICULAR NOISE	68.1	66.4	63.1	58.6	67.1
			W/O AMBIE	אייי	W/ AMBIENT
		- ar	W/O AMBIE 68.1	TAT	68.1
PK HR LEQ WITHOUT				****	
MIT PK HR LEQ WITH			68.1		67.1
LDN WITHOUT TOPO A	AND BARRIER	=	67.1		
MIT LDN WITH TOPO		=	67.1	*****	67.1

NOISE LEVEL ADDITION (dBA)

Unit 405 (Residential) - Roadway + Ralph's Mechanical/Truck Deliveries

balcony (unmitigated)

Street Name	Noise Level (dBA)	10 ^A dBA/10
De La Vina	62.5	1,778,279.4
Ralph's Mech+Truck	Del. 59.0	794,328.2
Combined Noise Leve	(dBA) = 64.1	2,572,607.6

balcony (mitigated)

Street Name	Noise Level (dBA)	10^dBA/10
De La Vina	51.5	141,253.8
Ralph's Mech+Truck	Del. 59.0	794,328.2
Combined Noise Leve	(dBA) ≡ 59.7	935,582.0

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (MODIFIED FOR Ldn) - (CALVENO) SANTA BARBARA

PROJECT: Radio So	uare - Santa Barbara		-	JOB #:	1512-06-08
ROADWAY: De La Vi				DATE:	15-Sep-06
	- Balcony (no wall)			BY:	Mike Rosa
HOCATION. OHIE 103	2020017 (110 11111)				
ADT = 13,300			·	PK HR VOL =	1,330
SPEED = 25					
PK HR % = 10					
CTL DIST= 41					
DIST N/F= 24			AUTO SLE I	DISTANCE =	52.55
DT WALL= 36			MED TRUCK	SLE DIST=	51.05
DT W/OB= 5			HVY TRUCK	SLE DIST=	47.60
HTH WALL= 0.0	*****				
OBS HTH= 35.0					
AMBIENT= 0.0					
ROADWAY VIEW:	LF ANGLE= -90				
	RT ANGLE= 90				
	DF ANGLE= 180				
SITE CONDITIONS (1	0=HARD SITE, 15=SOFT	SITE)			
AUTOMOBILES =	10	•			
	10		GRADE ADJ	USTMENT=	0.00
				NT TO HEAVY	
HEAVY TRUCKS =	10		(ADCODING	N1 10 1111111	1110 0110 /
BARRIER = 1	(O=WALL, L=BERM)		EL AUTOMO	DTT.DC -	0.0
PAD EL = 0.0			EL MEDIUM		2.3
ROAD EL $=$ 0.0				TRUCKS =	8.0
GRADE = 0.1	*		EL HEAVY	TRUCKS =	8.0
VEHICLE TYPE		DAY	EVENING	NIGHT	DAILY
	<u> </u>	0.775	0.129	0.096	0.9742
AUTOMOBILES		0.848		0.103	
MEDIUM TRUCKS		0.865			
HEAVY TRUCKS		V.665	0.027	0.108	0.0071
	NOISE IMPACTS WITHO	TOTAL TOTAL	O OD BARRT	ED SUTEININ	<u> </u>
	NOISE IMPACTS WITHO	OT TOP	O OK BARRI	EK PHIELDIN	G
	PK HR LEQ DAY	LEQ	EVEN LEQ	NIGHT LEQ	LDN
AUTOMOBILES LEQ	61.0	59.1	57.3	51.3	59.9
MEDIUM TRUCKS LEQ	55.5	54.0	47.7	46.1	54.6
HEAVY TRUCKS LEQ	58.0	56.6	47.6	48.8	57.2
VEHICULAR NOISE	63.5	61.8	58.2	54.0	62.5
,			_		
	NOISE IMPACTS WITH	TOPO A	ND BARRIER	SHIELDING	. <u></u>
	DV 110 120 532	TEC	ייין זייין	NIGHT LEQ	LDN
					62.5
VEHICULAR NOISE	63.5	61.8	58.2	54.0	02.5
			W/O AMBIE	NT	W/ AMBIENT
PK HR LEO WITHOUT	TOPO OR BARRIER =		63.5		63.5
	TOPO AND BARRIER =		63.5	****	* 63.5
LDN WITHOUT TOPO A			62.5		62.5
MIT LDN WITH TOPO	and Diminization		62.5	****	
WII TODO WIIN IOPO	WAY DUKKTRIK -		02.0		-

PROJECT: Radio Sq	uare - Santa Barbar	a.	_ 		1512-06-08
ROADWAY: De La Vi	na			DATE:	15-Sep-06
LOCATION: Unit 405	- Balcony (w/wall)			BY:	Mike Rosa
	<u> </u>				
ADT = 13,300				PK HR VOL =	1,330
SPEED = 25					
PK HR % = 10					
CTL DIST= 41					
DIST N/F= 24				DISTANCE =	
DT WALL= 36			MED TRUCK	SLE DIST=	54.64
DT W/OB= 5			HVY TRUCK	SLE DIST=	50.68
HTH WALL= 38.0	(3.0' wall)				
OBS HTH= 40.0					
AMBIENT= 0.0					
ROADWAY VIEW:	LF ANGLE= -90				
101111111111111111111111111111111111111	RT ANGLE= 90				
	DF ANGLE= 180				
פויים כמתחוידומוס (1	0=HARD SITE, 15=SOF	T SITE			
AUTOMOBILES =					
			במאטב אווים	USTMENT=	0.00
MEDIUM TRUCKS =			=	NT TO HEAVY	
HEAVY TRUCKS =			(ADOUG INE	NI IO HEAVI	IROCKD
BARRIER =	(0=WALL,1=BERM)		*** *********	DITEC	0.0
PAD EL = 0.0				BILES =	2.3
ROAD EL = 0.0				TRUCKS=	
GRADE = 0.1	8		EL HEAVY	TRUCKS =	8.0
				3.T. G17.T	1 1 1 1 T 1 T 1 T
VEHICLE TYPE		DAY	EVENING	NIGHT	DAILY
AUTOMOBILES		0.775	0.129	0.096	0.9742
MEDIUM TRUCKS		0.848	0.049	0.103	0.0184
HEAVY TRUCKS		0.865			0.0074
	NOISE IMPACTS WIT	HOUT TOP	O OR BARRI	ER SHIELDIN	G
	PK HR LEQ D	AY LEQ	EVEN LEQ	NIGHT LEQ	LDN
AUTOMOBILES LEQ	60.7	58.8	57.0	51.0	59.6
MEDIUM TRUCKS LEQ	55.2	53.7		45.8	54.3
HEAVY TRUCKS LEQ	57.8				56.9
VEHICULAR NOISE	63.2	61.5	57.9	53.7	62.2
				CHIETNING	<u> </u>
	NOISE IMPACTS WIT	н торо а	ND BARRIER	SHIEDDING	
	PK HR LEQ D	AY LEQ	EVEN LEQ	NIGHT LEQ	LDN
VEHICULAR NOISE	52.5				
			W/O AMBIE	יריאי	w/ AMBIENT
	mone on parties	_			63.2
	TOPO OR BARRIER		63.2		
MIT PK HR LEQ WITH	I TOPO AND BARRIER	=	52.5		
LDN WITHOUT TOPO A MIT LDN WITH TOPO			62.2	****	62.2 51.5

PROJECT: Radio Squ	iare - Santa Bai	 rbara		JOB #:	1512-06-08
ROADWAY: De La Vir				DATE:	15-Sep-06
LOCATION: Unit 405		a11)			Mike Rosa
MOCATION: UNIT 405	- Tacade (no m	,			
ADT = 13,300	-			PK HR VOL =	1,330
SPEED = 25					
PK HR % = 10					
CTL DIST= 46					
DIST N/F= 24			AUTO SLE I	DISTANCE =	56.54
DT WALL≔ 36			MED TRUCK	SLE DIST=	55.15
DT W/OB= 10			HVY TRUCK	SLE DIST=	51.97
HTH WALL= 0.0	*****				
OBS HTH= 35.0					
AMBIENT= 0.0					
ROADWAY VIEW:	LF ANGLE= -9	10			
ROIDHIII VAAN	RT ANGLE= 9				
	DF ANGLE= 18				
SITE CONDITIONS (1					
AUTOMOBILES =	10				
			מטאחה אחתו	USTMENT=	0.00
MEDIUM TRUCKS =			=	NT TO HEAVY	
HEAVY TRUCKS =			(ADOUG IMEI	NI IO HEAVE	inocia)
BARRIER = 1	(O=WALL, 1=BERM	ı)	THE ALTERNACI	ב ממדד	0.0
PAD EL = 0.0				BILES =	2.3
ROAD EL = 0.0				TRUCKS=	
GRADE = 0.1	%		EL HEAVY	TRUCKS =	8.0
VEHICLE TYPE		DAY	EVENING	NIGHT	DAILY
		0.775	0.129	0.096	0.9742
AUTOMOBILES				0.103	
MEDIUM TRUCKS		0.865		0.108	
HEAVY TRUCKS		0.865	0.027	3.200	
				- autenti	~
	NOISE IMPACTS	WITHOUT TOP	O OR BARRI	ER SHIELDIN	
	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN
AUTOMOBILES LEQ	60.7			51.0	59.6
MEDIUM TRUCKS LEQ	55.2	53.7	47.3	45.8	54.2
HEAVY TRUCKS LEQ	57.7	56.2	47.2	48.4	56.8
VEHICULAR NOISE	63.2	61.5	57.8	53.7	62.2
APHICOHAK MOISE	UJ.2	03	2		
	NOISE IMPACTS	WITH TOPO A	ND BARRIER	SHIELDING	
	PK HR LEQ	DAY I.EO	EVEN LEO	NIGHT LEO	LDN
VEHICULAR NOISE	63.2			53.7	
			w/o ambie	NT	w/ AMBIENT
PK HR LEQ WITHOUT	TOPO OR RAPRIER	? =	63.2		63.2
MIT PK HR LEQ WITHOUT			63.2	*****	
		.BK -	62.2		62.2
LDN WITHOUT TOPO A		=	62.2	****	
MIT LDN WITH TOPO	AND BAKKIEK	=	02.2		J2.2

Appendix C

Stationary Noise Source Calculations

-			

Barrier at Balcony Only



PROJECT: SOURCE: LOCATION:		quare HVAC Nois or - Unit				JOB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa
	······································						
OBS DIST=	89.0	:	•				
DT WALL=	84.0						
DT W/OB=	5.0						
HTH WALL=	0.0	*****					
BARRIER =	0.0	(0=WALL,1:	=BERM)		•		
OBS HTH=	5.0						
NOISE HTH=	14.0			BARRIER+			:
OBS EL =	0.0			TOPO SHIE	LDING =	0.00	
NOISE EL =	0.0			NOISE HTH		14.0	
DROP-OFF=	20.0	(20 ⊨ 6	dBA PE	R DOUBLING	OF DISTAN	ICE)	
COFF							
COLL			NOISE I	EVELS (dbA	.)		•
1	DIST (FT)	CNEL	Lmax	L2	L8	L25	L50
)	011242					•
REF LEVEL	10	79 .7					
PROJ LEVE			-19.0	-19.0	-19.0	-19.0	
SHIELDING	B 89		0.0	0.0	0.0	0.0	
PUT I'EAEI'			-19.0	-19.0	-19.0	-19.0	-19.0%

PROJECT:	Radio Sq Save-On	HVAC Noise			Γ	OB #: ATE:	1512-06-08 31-Aug-06
LOCATION:	1st Floo	r - Unit :	104 w/wal	l @ balcon	у Е	Y:	Mike Rosa
						•	
OBS DIST=	89.0						•
DT WALL=	84.0						•
DT W/OB=	5.0						
HTH WALL=	6.5	*****					
BARRIER =	0.0	(0=WALL,1=	=BERM)				
OBS HTH=	5.0						
NOISE HTH=	14.0		_	BARRIER+	- TXICI -	-5.90	
OBS EL =	0.0			ropo shieli		14.0	
NOISE EL =	0.0			NOISE HTH I			
DROP-OFF=	20.0	(20 = 6)	dba per	DOUBLING C	N. DIRITAINC	.E)	
COFF							
			NOISE LE	VELS (dBA)	* 0	L25	L50
]	DIST (FT)	CNEL	Lmax	<u>L2</u>	T8	1123	200
REF LEVEL	10	79.7		40.0	-19.0	-19.0	-19.0
PROJ LEVE	L 89	60.7	-19.0	-19.0		-5.9	
SHIELDING	89	-5.9	-5.9	-5.9	-5.9	-24.9	
ADJ LEVEL	. 89	54.8	-24.9	-24.9	-24.9	-24.5	

PROJECT: SOURCE: LOCATION:		quare HVAC Nois or - Unit				JOB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa
DOCALION.	2110 1100	<u> </u>					
OBS DIST=	51.0						
DT WALL= DT W/OB=	46.0 5.0			•			
HIH WALL=	0.0	*****					
BARRIER =	0.0	(0=WALL,1	=BERM)				
OBS HTH=	5.0			BARRIER+			
NOISE HTH= OBS EL =	2.0 15.0			TOPO SHIEL	DING =	0.00	
NOISE EL =	12.0			NOISE HTH	EL=	14.0	
DROP-OFF=	20.0	(20 = 6)	dba per	DOUBLING	OF DISTAL	ICE)	٠.
COFF			MOTOR I	EVELS (dBA)	١		
_		CO.TEST		L2	L8	L25	L50
	DIST (FT)	CNEL	Lmax	112			
REF LEVEL	10	79.7					
PROJ LEVE			-14.2	-14.2	-14.2	-14.2	-14.2
SHIELDING	_ 51		0.0	0.0	0.0	0.0	0.0
ADJ LEVEL		65.5	-14.2	-14.2	-14.2	-14.2	-14323

PROJECT: SOURCE:	Radio So Save-On	HVAC Nois	e ,	17 0 1-7	I	JOB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa	
LOCATION:	2nd Floo	or - Unit	204 w/wa.	ll @ balcor	ıy ı	DI:	MILKE RODA	
OBS DIST= DT WALL= DT W/OB= HTH WALL= BARRIER = OBS HTH= NOISE HTH= OBS EL = NOISE EL = DROP-OFF=	51.0 46.0 5.0 6.5 0.0 5.0 2.0 15.0 12.0 20.0	******** (0=WALL, 1=		BARRIER+ TOPO SHIEL NOISE HTH : DOUBLING (EL=	-8.30 14.0 CE)		
COFF								
				evels (dbA)		TOF	L50	
	IST (FT)	CNEL	Lmax	<u>L2</u>		L25		
REF LEVEL PROJ LEVEL SHIELDING	10 L 51 51	79.7 65.5 -8.3	-14.2 -8.3	-14.2 -8.3	-14.2 -8.3	-14.2 -8.3	-14. -8.	.3
ADT TEVEL	51	57.2	-22.5	-22.5	-22.5	-22.5	-22.	. D.

PROJECT: SOURCE: LOCATION:		quare HVAC Noise or - Unit				JOB #: DATE: BY:	1512- 31-Au Mike	g-06
TOCALION.	2110 2 2 0 0							
OBS DIST=	21.0			٠				
DT WALL=	16.0	T.						
DT W/OB=	5.0	.*						
HTH WALL=	0.0	*****						
BARRIER =	0.0	(0=WALL,1=	=BERM)					
OBS HTH=	5.0							•
NOISE HTH=	2.0		1	BARRIER+		0.00		
OBS EL =	15.0			TOPO SHIEL		14.0	• .	•.
NOISE EL =	12.0			NOISE HTH		the state of the s		, .
DROP-OFF=	20.0	(20 = 6	dba per	DOUBLING	OR DISTAM	CB)		
COFF								
		• "		EVELS (dBA)		L25		L50
<u>_</u>	IST (FT)	CNEL	Lmax	L2	<u> 18</u>	1127		
								£*
REF LEVEL	10		· .	-6.4	-6.4	-6.4		-6.4
PROJ LEVE			-6.4	0.0	0.0	0.0		0.0
SHIELDING	21		0.0 -6.4	-6.4	-6.4	-6.4		-6:A
ADJ LEVEL	: 21	73.3	-6.4	-0.4				The production of the last

PROJECT: SOURCE:	Radio Squ Save-On I	IVAC Noise	: :05P w/w	all @ balco	I	JOB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa
LOCATION:	2110 F.100.	L - OILLE .	.0.021. 11/11		_		
OBS DIST=	21.0				•		
DT WALL=	16.0						4
DT W/OB≔	5.0						
HTH WALL=	11.5	*****					
BARRIER =	0.0	(O=WALL,l=	BERM)				
OBS HTH=	5.0		•				
NOISE HTH=	2.0			BARRIER+		0	
OBS EL =	15.0			TOPO SHIELI		-15.70	
NOISE EL =	12.0			NOISE HTH B		14.0	
DROP-OFF=	20.0	(20 = 6)	dba per	DOUBLING C	F DISTANC	CE)	
COFF							
			NOISE L	EVELS (dba)			TED
I	DIST (FT)	CNEL	Lmax	L2	L8	<u>L25</u>	L50
REF LEVEL	10	79.7				c 4	-6.4
PROJ LEVE	L 21	73.3	-6.4	-6. 4	-6.4	-6.4	-15.7
SHIELDING	21	-15.7	-15.7	-15.7	-15.7	-15.7	
ADJ LEVEL		57.6	-22.1	-22.1	-22.1	-22.1	-22.1

SOURCE: Save-	Square On HVAC Nois loor - Unit				JOB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa	
HOCKITOM: MILE I							
OBS DIST= 19.	0			r.		•	
DT WALL= 14.	0				*		
DT W/OB= 5.	0		•				
HTH WALL= 0.	0 ******		•	•			
BARRIER = 0.	0 (0=WALL,1	=BERM)			•	•	
OBS HTH= 5.	0.						
NOISE HTH= 2.	0		BARRIER+		0.00		
OBS EL = 15.	0		TOPO SHIEL		0.00		
NOISE EL = 12.	0		NOISE HTH		14.0		
DROP-OFF= 20.	0 (20 = 6	dba pe	R DOUBLING	OF DISTAL	ICE)		
COFF							
,		NOISE I	EVELS (dBA)		- 0-	L50	
DIST (F	T) CNEL	Lmax	L2	L8	L25	150	***
REF LEVEL	10 79.7			-5.6	-5.6	-5	6
PROJ LEVEL	19 74.1	-5.6	-5.6		0.0	_	.0
SHIELDING	19 0.0	0.0	0.0	0.0	-5.6	_	. ₂₄ 6 ∘∴
ADJ LEVEL	19 74.1	-5.6	-5.6	-5.6	-5.6		Park sandrage 1

DDO TROP	Padio Sc	11278				JOB #:	1512-06-08
PROJECT:	Radio Square Save-On HVAC Noise					DATE:	31-Aug-06
SOURCE:		2nd Floor - Unit 107R					Mike Rosa
LOCATION:	2nd Floo	or - Unit.	LUZK				
						•	
OBS DIST=	19.0						
DT WALL=	14.0						
DT W/OB=	5.0						
HTH WALL=	12.5	*****					
BARRIER =	0.0	(0=WALL,1=	=BERM)				
OBS HTH=	5.0						
NOISE HTH=	2.0			BARRIER+			
OBS EL =	15.0			COPO SHIEL		-16.60	
NOISE EL =				NOISE HTH		14.0	
DROP-OFF=	20.0	(20 = 6)	dba per	DOUBLING (OF DISTAN	ĆE)	
COFF		•					•
COPT			NOISE LE	VELS (dBA)			
т	DIST (FT)	CNEL	Lmax	L2	ΤB	L25_	L:50
	<u> </u>						
REF LEVEL	10	79.7					· _
			-5.6	-5.6	~5.6	-5.6	
	ш 19 19		-16.6	-16.6	-16.6	-16.6	-16.6
SHIELDING		_	-22.2	-22.2	-22.2	-22.2	-22.2
ADJ LEVEL	19	57.5	- 44.4				

PROJECT: SOURCE:	Radio Sq Save-On	HVAC Nois	e 200			JOB #: DATE: BY:	31-A	-06-08 1g-06 Rosa
LOCATION:	3rd Floo	or - Unit	304					
OBS DIST= DT WALL= DT W/OB=	85.0 80.0 5.0							
HTH WALL= BARRIER = OBS HTH=	0.0 0.0 5.0	******* (O=WALL, 1:						•
NOISE HTH= OBS EL = NOISE EL =	2.0 26.0 12.0			BARRIER+ TOPO SHIE NOISE HTH	EL=	0.00 14.0	* "	#*
DROP-OFF= COFF	20.0	(20 = 6 CNEL		R DOUBLING LEVELS (db. L2		L25		L50
REF LEVEL PROJ LEVE SHIELDING ADJ LEVEL	10 L 85 85	61.1 0.0	-18.6 0.0 -18.6	-18.6 0.0 -18.6	-18.6 0.0 -18.6			-18.6 0.0 -18.6

PROJECT:	Radio So	uare				JOB #:	1512-06-08
SOURCE:		HVAC Nois	e .			DATE:	31-Aug-06
LOCATION:				l @ balcor	ıy	BY:	Mike Rosa
OBS DIST=	85.0						
DT WALL=	80.0						•
DT W/OB=	5.0						
HTH WALL=	5.0	*****					
BARRIER =	0.0	(0=WALL, 1:	=BERM)				
OBS HTH=	5.0						
NOISE HTH=	2.0		-	BARRIER+			
OBS EL =	26.0			COPO SHIELI		-6.00	
NOISE EL =	12.0		ľ	NOISE HTH 1		14.0	
DROP-OFF=	20.0	(20 = 6)	dba per	DOUBLING C	OF DISTAN	CE)	
COFF							
			NOISE LE	VELS (dBA)			
D	IST (FT)	CNEL	Lmax	L2	L8	L25	L50
REF LEVEL	10	79.7			".	_	
PROJ LEVE	ւ 85	61.1	-18.6	-18.6	-18.6	-18.6	
SHIELDING	85	-6.0	-6.0	-6.0	-6.0	-6.0	
ADJ TEVET	85	55.1	-24.6	-24.6	-24.6	-24.6	-24.6

PROJECT: SOURCE:		HVAC Noise				JOB #: DATE: BY:	1512-06 31-Aug- Mike Ro	06
LOCATION:	3rd F100	or - Unit	303					
OBS DIST=	19.0							
DT W/OB=	5.0	a a a a a a a a a a a a a						
HTH WALL=	0.0	****						
BARRIER =	0.0	(0=WALL,1=	=BERM)		•		-	
OBS HTH=	5.0				-			
NOISE HTH⊨	2.0			BARRIER+		0.00		
OBS EL =	26.0			TOPO SHIEL		0.00		*
NOISE EL =	12.0		•	NOISE HTH		14.0		
DROP-OFF=	20.0	(20 = 6)	dba pe	R DOUBLING (OF DISTAN	ICE)		
COFF				_				
		•	NOISE 1	LEVELS (dBA)			T 1	- 0
Ι	DIST (FT)	CNEL	Lmax	<u>L2</u>	<u> 1.8</u>	L25	. بــــــــــــــــــــــــــــــــــــ	50
REF LEVEL	10	79.7				<u>.</u> .		-5.6
PROJ LEVE	ь 19	74.1	-5.6	-5.6	-5.6	-5.6		0.0
SHIELDING	· 19	0.0	0.0	0.0	0.0	0.0		
BELLEVIEW TOTAL			-5.6	-5.6	-5.6	-5.6		-5,46

PROJECT: SOURCE: LOCATION:	Radio So Save-On 3rd Floo	quare HVAC Noise or - Unit 3	05 (w/wa	ll @ balco		JOB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa
OBS DIST= DT WALL= DT W/OB= HTH WALL= BARRIER = OBS HTH= NOISE HTH= OBS EL = NOISE EL = DROP-OFF=	26.0	******** (0=WALL,1= (20 = 6] :	BARRIER+ TOPO SHIELI NOISE HTH : DOUBLING (EL=	-15.70 14.0 CE)	
COFF	OIST (FT)	CNEL	NOISE LE Lmax	VELS (dBA)	L8	L25	L 50
REF LEVEL PROJ LEVE SHIELDING ADJ LEVEL	10 L 19 19	79.7 74.1	-5.6 -15.7 -21.3	-5.6 -15.7 -21.3	-5.6 -15.7 -21.3	-5.6 -15.7 -21.3	-5.6 -15.7 -21.3

PROJECT: SOURCE:	Radio Sq Save-On	uare HVAC Noise r - Unit 3	= 307			JOB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa
LOCATION:	310 1100				-		
OBS DIST= DT WALL=	25.0 20.0						
DT W/OB= HTH WALL= BARRIER =	5.0 0.0 0.0	******* (O=WALL,1=	=BERM)			•	
OBS HTH= NOISE HTH=	5.0	(0-11122-)-		BARRIER+		0.00	
OBS EL = NOISE EL =	26.0 12.0	(20 = 6		TOPO SHIELI NOISE HTH I DOUBLING C	EL=	14.0	
DROP-OFF=	20.0	(20 = 0		EVELS (dBA)			
D	IST (FT)	CNEL	Lmax_	<u>L2</u>	L8	L25	<u>1.50</u>
REF LEVEL PROJ LEVEI SHIELDING	10	79.7 71.7 0.0	-8.0	-8.0 0.0	-8.0 0.0 -8.0		0.0
ADJ LEVEL	25	71.7	-8.0	-8.0	-0.0		State of the State of the

PROJECT: SOURCE: LOCATION:	Radio So Save-On	HVAC Noise	e 307 w/wa]	l @ balcon		JOB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa
OBS DIST= DT WALL= DT W/OB= HTH WALL= BARRIER = OBS HTH= NOISE HTH= OBS EL = NOISE EL =	25.0 20.0 5.0 8.0 0.0 5.0 2.0 26.0 12.0 20.0	****** (O=WALL,1=	=BERM)	BARRIER+ TOPO SHIELI NOISE HTH I DOUBLING C	DING = EL=	-14.20 14.0	
DROP-OFF=	DIST (FT)	CNEL		EVELS (dBA)	L8	L25	L50
REF LEVEL PROJ LEVE SHIELDING ADJ LEVEL	10 L 25 25	79.7 71.7 -14.2 57.5	-8.0 -14.2 -22.2	-8.0 -14.2 -22.2	-8.0 -14.2 -22.2	-8.0 -14.2 -22.2	-14.2

SOURCE: S		are NAC Noise - Unit 4			1	JOB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa	
OBS DIST= DT WALL= DT W/OB= HTH WALL= BARRIER = OBS HTH= NOISE HTH= OBS EL = NOISE EL = DROP-OFF=	0.0	******* 0=WALL,1=		BARRIER+ TOPO SHIELD NOISE HTH EI DOUBLING OF	_=	0.00 14.0 CE)		
COFF DISTRIBUTION REF LEVEL PROJ LEVEL SHIELDING ADJ LEVEL	10 85 85 85 85	79.7 61.1 0.0 61.1	NOISE L Lmax -18.6 0.0 -18.6	L2 -18.6 0.0 -18.6	_18.6 _0.0 _18.6	L25 -18.6 0.0 -18.6	0.0	

PROJECT:	Radio So	nuare			Ĺ	JOB #:	1512-06-08
SOURCE:		HVAC Noise	B]	DATE:	31-Aug-06	
LOCATION:	4th Floo	or - Dinit 4	- 402 w/wa:	il @ balcon	ıy I	BY:	Mike Rosa
HOCALION:	#CH P.100	71 01122		······································			
OBS DIST=	85.0						
DT WALL=	80.0						
DT W/OB=	5.0						
HTH WALL=	5.0	*****					
BARRIER =	0.0	(0=WALL, 1=	=BERM)				
OBS HTH=	5.0						
NOISE HTH=	2.0		:	BARRIER+			
OBS EL =	37.0			TOPO SHIELI	DING =	-7.10	
NOISE EL =			;	NOISE HTH P	EL=	14.0	
DROP-OFF=	20.0	(20 = 6)	dba per	DOUBLING C	F DISTANC	CE)	
COFF		••					
COLL			NOISE LE	VELS (dbA)			
I	DIST (FT)	CNEL	Lmax	L2	L8	L25	L50
REF LEVEL	10	79.7	•				19.6
PROJ LEVE	L 85	61.1	-18.6	-18.6	-18.6	-18.6	
SHIELDING	85	-7.1	-7.1	-7.1	-7.1	-7.1	
ADJ LEVEL	85	54.0	-25.7	-25.7	-25.7	-25.7	-25.7

PROJECT: SOURCE:		puare HVAC Noise or - Unit				JOB #: DATE: BY:	1512- 31-Au Mike	.g-06 .
LOCATION:	401 1100	71 01111						
OBS DIST= DT WALL= DT W/OB= HTH WALL= BARRIER = OBS HTH= NOISE HTH= OBS EL = NOISE EL =	48.0 43.0 5.0 0.0 0.0 5.0 2.0 37.0 12.0	******** (0=WALL,1=		BARRIER+ TOPO SHIEI NOISE HTH R DOUBLING	EL=	0.00 14.0		
DROP-OFF=	20.0	(∠0 = 6	UDA FE	L DOOLLAND				
COFF			NOISE 3	LEVELS (dba)			
Т	DIST (FT)	CNEL	Lmax	L2	L8	L25		L50
REF LEVEL PROJ LEVE SHIELDING	10 L 48 48	79.7 66.1 0.0	-13.6 0.0 -13.6	-13.6 0.0 -13.6	-13.6 0.0 -13.6	-13.6 0.0 -13.6	j	-13.6 \ 0.0 -13.6

PROJECT:	Radio So	quare				JOB #:	1512-06-08
SOURCE:		HVAC Nois				DATE:	31-Aug-06
LOCATION:	4th Floo	or - Unit	403 w/wa.	ll @ balco:	ıy	BY:	Mike Rosa
OBS DIST=	48.0						
DT WALL=	43.0						
DT W/OB=	5.0						
HTH WALL=	5.0	*****					
BARRIER =	0.0	(0=WALL, 1:	=BERM)				
OBS HTH=	5.0						
NOISE HTH=	2.0		;	BARRIER+			
OBS EL =	37.0		Ī	TOPO SHIEL	DING =	-9.30	
NOISE EL =	12.0			NOISE HTH		14.0	
DROP-OFF=	20.0	(20 = 6)	dba per	DOUBLING (OF DISTAN	ICE)	
COFF							
			NOISE LE	EVELS (dba)			
r	IST (FT)	CNEL	Lmax	L2	LB	L25	L50
REF LEVEL	10	79.7					
PROJ LEVE	L 48	66.1	-13.6	-13.6	-13.6	-13.6	
SHIELDING	48		-9.3	-9.3	-9.3	-9.3	
ADJ LEVET	48	56.8	-22.9	-22.9	-22.9	-22.9	-22.9

Barrier at HVAC Unit Only



PROJECT: SOURCE: LOCATION:		puare HVAC Nois or - Unit				JOB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa
HOCHILLOIT					 · .		
OBS DIST=	89.0						
T WALL=	1.0						
DT W/OB=	88.0						• *
HTH WALL=	0.0	*****					
BARRIER =	0.0	(O=WALL, 1:	=BERM)			•	
OBS HTH=	5.0						
NOISE HTH=	14.0			BARRIER+	·	0.00	
OBS EL =	0.0			TOPO SHIE		14.0	
NOISE EL =	0.0			NOISE HTH			
DROP-OFF=	20.0	(20 = 6)	dba pei	R DOUBLING	OF DISTAL	(CE)	4
COFF							
			NOISE I	EVELS (dba		L25	L50
D	IST (FT)	CNEL	Lmax	L2	LB	Ц25	
REF LEVEL	10		_	10.0	-19.0	-19.0	-19.0
PROJ LEVEI			-19.0	-19.0	0.0	0.0	
SHIELDING	В9		0.0	0.0	-19.0	-19.0	
ADJ LEVEL	89	60.7	-19.0	-19.0	-19.0		140.5

PROJECT:	Radio So	nare			· · · · · ·	JOB #:	1512-06-08
SOURCE:		HVAC Noise				DATE:	31-Aug-06
LOCATION:	1st Floo	or - Unit :	104 w/wal	.l @ HVAC		BY:	Mike Rosa
OBS DIST=	89.0		•				•
DT WALL=	1.0						
DT W/OB=	88.0		٠.				
HTH WALL=	24.0	****					
BARRIER =	0.0	(0=WALL,1=	=BERM)				
OBS HTH=	5.0						
NOISE HTH=	14.0			BARRIER+			
OBS EL =	0.0		-	COPO SHIELI		-17.30	
NOISE EL =	0.0			OISE HTH		14.0	
DROP-OFF=	20.0	(20 = 6)	dba per	DOUBLING C	F DISTAN	ICE)	
COFF	•		•	·			
			NOISE LE	VELS (dBA)			7 5 0
I	IST (FT)	CNEL	Lmax	<u>L2</u>	<u> 18</u>	<u>L25</u>	L50
					1		
REF LEVEL	10	79.7					10.0
PROJ LEVE	L 89	60.7	-19.0	-19.0	-19.0	-19.0	-19.0
SHIELDING	89	-17.3	-17.3	-17.3	-17.3	-17.3	
ADJ TEVEL	89	43.4	-36.3	-36.3	-36.3	-36.3	<u>-36.3</u>

PROJECT: SOURCE: LOCATION:	Radio Squ Save-On H 2nd Floor	WAC Noise		·		JOB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa	
2002								
OBS DIST=	51.0		•			•	•	
DT WALL=	1.0							
DT W/OB=	50.0							
HTH WALL=	0,0	*****						
BARRIER =	0.0 (0=WALL,1=	=BERM)					
OBS HTH=	20.0		•					
NOISE HTH=	14.0			BARRIER+	D#14	0.00		
OBS EL =	0.0			TOPO SHIEL		14.0	•	
NOISE EL =	0.0			NOISE HTH	ELE DE DECUMN			
DROP-OFF=	20.0	(20 = 6	dba per	DOUBLING (OF DISIAN	(CE)		
COFF	•							
			NOISE L	evels (dba)		L25	. L 50	
r	IST (FT)	CNEL	Lmax	<u>L2</u>	<u> LB</u>			
	 :							
REF LEVEL		79.7		14.0	-14.2	-14.2	-14.	.2
PROJ LEVE		65.5	-14.2	-14.2	0.0	0.0	_	. 0
SHIELDING	51	0.0	0.0	0.0	-14.2	-14.2		2
ADJ LEVEL	51	65.5	-14.2					All the second second

PROJECT:	Radio So					JOB #: DATE:	1512-06-08 31-Aug-06
SOURCE:		HVAC Nois					Mike Rosa
LOCATION:	2nd Floo	or - Unit	204 w/wal	I @ HVAC	· · · · · · · · · · · · · · · · · · ·	BY:	MIKE ROSE
OBS DIST=	51.0						
DT WALL=	1.0						
DT W/OB≃	50.0						
HTH WALL=	24.0	*****			•		
BARRIER =	0.0	(0=WALL,1:	=BERM)			,	
OBS HTH=	20.0						
NOISE HTH=	14.0		3	BARRIER+			
OBS EL =	0.0		-	ropo shiel		-16.60	
NOISE EL =	0.0			NOISE HTH		14.0	
DROP-OFF=	20.0	(20 = 6)	dba per	DOUBLING (OF DISTAN	ICE)	
COFF						•	
			NOISE LE	VELS (dba)			
D	IST (FT)	CNEL	Lmax	L2	L8	L25_	L50
		·					
REF LEVEL	10	79.7					
PROJ LEVE	և 51	65.5	-14.2	-14.2	-14.2	-14.2	-14.2
SHIELDING	51	-16.6	-16.6	-16.6	-16.6	-16.6	
ADJ LEVEL	51	48.9	-30.8	-30.8	-30.8	-30.8	-30.8

PROJECT: SOURCE:		uare HVAC Noise or - Unit				JOB #: DATE: BY:	1512- 31-Au Mike	
LOCATION:	2nd Floc	or - Olive .	LODIC					
OBS DIST=	21.0							
DT WALL=	1.0							•
DT W/OB=	.20.0							
HTH WALL=	0.0	*****						
BARRIER =	0.0	(0=WALL, 1=	=BERM)			•		
OBS HTH=	20.0							
NOISE HTH=	14.0			BARRIER+		0.00		
OBS EL =	0.0			TOPO SHIE		14.0		
NOISE EL =	0.0			NOISE HTH				9
DROP-OFF=	20.0	(20 = 6)	dba per	OUBLING	OF DISTA	NCE)		
COFF								
•			NOISE L	EVELS (dbA		T 25		L50
I	IST (FT)	CNEL	Lmax	<u> L2</u>	<u>LB</u>	L25		
REF LEVEL	10	79.7		<i>c</i> 1	-6.4	-6.4		-6.4
PROJ LEVE	L 21	73.3	-6.4	-6.4	0.0			0.0
SHIELDING	21	0.0	0.0	0.0	-6.4	· .		-6.4
ADJ LEVEL	21	73.3	-6.4	-6.4	-0.4			dans cape of a

PROJECT:	Radio So	quare				JOB #:	1512-06-08
SOURCE:	Save-On	HVAC Nois	e			DATE:	31-Aug-06
LOCATION:	2nd Floo	or - Unit_	105R_w/wa	all @ HVAC		BY:	Mike Rosa
							
OBS DIST=	21.0						
DT WALL=	1.0						
DT W/OB=	20.0						
HTH WALL=	24.0	*****					
BARRIER =	0.0	(0=WALL, 1:	=BERM)				
OBS HTH=	20.0						
NOISE HTH=	14.0		J	BARRIER+			
OBS EL =	0.0			ropo shiel:		-16.60	
NOISE EL =	0.0			NOISE HTH		14.0	
DROP-OFF=	20.0	(20 = 6)	dba per	DOUBLING (OF DISTAN	ICE)	
COFF							
			NOISE LE	VELS (dba)		·	
I	IST (FT)	CNEL	Lmax	L2	L8	L25	L50
	•						
REF LEVEL	10	79.7					
PROJ LEVE	L 21	73.3	-6.4	-6.4	-6.4	-6.4	-6.4
SHIELDING	21	-16.6	-16.6	-16.6	-16.6		-16.6
ADJ LEVEL	21	56.7	-23.0	-23.0	-23.0	-23.0	-23.0

PROJECT: SOURCE:		HVAC Noise				JOB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa	· ·
LOCATION:	2nd Floo	or - Unit	LUTA					
OBS DIST= DT WALL= DT W/OB= HTH WALL= BARRIER = OBS HTH= NOISE HTH= OBS EL = NOISE EL = DROP-OFF=	19.0 1.0 18.0 0.0 0.0 20.0 14.0 0.0 0.0	********* (0=WALL, 1:		BARRIER+ TOPO SHIEI NOISE HTH DOUBLING	EL=	0.00 14.0		
COFF I REF LEVEL	OIST (FT)	CNEL 79.7	NOISE L	EVELS (dBA	•	L25 -5.6	L50 -5	6
PROJ LEVE SHIELDING ADJ LEVEL	19	0.0	-5.6 0.0 -5.6	0.0 -5.6	0.0 -5.6	0.0 -5.6	_).0 5 <u>.16</u>

PROJECT:	Radio So	_	- -			JOB #: DATE:	1512-06-08 31-Aug-06
SOURCE:		HVAC Nois					Mike Rosa
LOCATION:	2nd Floo	or - Unit	107R W/W	all @ HVAC		BY:	MITKE KOBB
OBS DIST=	19.0						
DT WALL=	1.0						
DT W/OB=	18.0						
HTH WALL=	24.0	*****					
BARRIER =	0.0	(0=WALL,1:	=BERM)				
OBS HTH=	20.0						
NOISE HTH=	14.0		1	BARRIER+			A
OBS EL =	0.0			TOPO SHIEL		-16.60	
NOISE EL =	0.0			NOISE HTH		14.0	
DROP-OFF=	20.0	(20 = 6)	dba per	DOUBLING (OF DISTAN	CE)	
COFF							
			NOISE LE	EVELS (dba)		•	
Γ	IST (FT)	CNEL	Lmax	L2	LB	L25	<u>L50</u>
					-		
REF LEVEL	10	79.7					
PROJ LEVE	ւ, 19	74.1	-5. 6	-5.6	-5.6	-5.6	-5.6
SHIELDING	19	-16.6	-16.6	-16.6	-16.6	-16.6	-16.6
ADJ LEVEL	19	57.5	-22.2	-22.2	-22.2	-22.2	

PROJECT: SOURCE:	Radio Squ Save-On F	nare NAC Noise	± 804		٠.,	JOB #: DATE: BY:	31-Aı	-06-08 1g-06 Rosa
LOCATION:	314 1100							
OBS DIST=	85.0							•
DT WALL=	1.0				•		• *	
DT W/OB=	84.0							
HTH WALL=	0.0	****				·		e.
BARRIER =	0.0	(O=WALL,1=	BERM)			• •		
OBS HTH=	31.0							
NOISE HTH=	14.0	-		BARRIER+	>T10	0.00		
OBS EL =	0.0			TOPO SHIELI		14.0		
NOISE EL =	0.0			NOISE HTH I	2511= 2511=			
DROP-OFF=	20.0	(20 = 6)	dba pei	R DOUBLING C	DE DISTRI	VCIE)		
COFF			NOISE I	EVELS (dBA)				
т	IST (FT)	CNEL	Lmax	L2	ΓB	L25		L50
	<u> </u>							
REF LEVEL	10	79.7						-18.6
PROJ LEVE		61.1	-18.6	-18.6	-18.6	-18.6		0.0
SHIELDING	- 85	0.0	0.0	, 0.0	0.0	0.0		-18 <u>.6</u>
ADJ LEVEL	85	61.1	-18.6	-18.6_	-18.6	<u>-18.6</u>	·	4500

PROJECT:	Radio So					JOB #: DATE:	1512-06-08 31-Aug-06
SOURCE:		HVAC Nois					Mike Rosa
LOCATION:	3rd Floo	or - Unit	304 w/wa.	I @ HVAC	· · · · · · · · · · · · · · · · · · ·	BY:	MINE RODA
				•			
OBS DIST=	B5.0						
DT WALL≔	1.0						
DT W/OB=	84.0						
HTH WALL=	24.0	*****					•
BARRIER =	0.0	(0=WALL, 1:	=BERM)				
OBS HTH=	31.0						
NOISE HTH=	14.0		1	BARRIER+			
OBS EL =	0.0		7	COPO SHIEL	DING =	-16.10	
NOISE EL =	0.0			NOISE HTH		14.0	
DROP-OFF=	20.0	(20 = 6)	dba per	DOUBLING (OF DISTAN	ICE)	
COFF		•					
3322			NOISE LE	VELS (dBA)			
ת	IST (FT)	CNEL	Lmax	L2	L8	L25	L50
REF LEVEL	10	79.7					
PROJ LEVEI		61.1	-18.6	-18.6	-18.6	-18.6	-18.6
SHIELDING	B5	-16.1	-16.1	-16.1	-16.1	-16.1	-16.1
ADJ LEVEL	85	45.0	-34.7	-34.7	-34.7	<u>-34.7</u>	-34.7

PROJECT:	Radio Sq	uare HVAC Noise	<u> </u>			JOB #: DATE:	31-A1	
SOURCE:	Save-Un	HVAC NOIBO	205			BY:	Mike	Rosa
LOCATION:	3rd Floo	r - Unit	000					
OBS DIST= DT WALL= DT W/OB= HTH WALL= BARRIER = OBS HTH= NOISE HTH= OBS EL = NOISE EL =	19.0 1.0 18.0 0.0 0.0 5.0 4.0 26.0 20.0	******** (0=WALL, l=		BARRIER+ TOPO SHIEI NOISE HTH R DOUBLING	EL=	-9.10 24.0 NCE)		
DROP-OFF= COFF	20.0 DIST (FT)	CNEL_	•	EVELS (dBA		L25		L50
REF LEVEL PROJ LEVE SHIELDING ADJ LEVEL	10 L 19 19	74.1 -9.1	-5.6 -9.1 -14.7	-5.6 -9.1 -14.7	-5.6 -9.1 -14.7		1 .	-5.6 -9.1 -14.7

PROJECT: SOURCE:		are IVAC Noise		l @ HVAC	I	OB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa
LOCATION:	310 F1001	OILLE S	305 117 11022				
OBS DIST=	19.0 1.0						
DT W/OB=	18.0						
HTH WALL=	24.0	*****					
BARRIER =	0.0 (0=WALL,1=	BERM)				
OBS HTH=	31.0						
NOISE HTH=	14.0	•	E	BARRIER+			
OBS EL =	0.0		•	OPO SHIELI	DING =	-14.20	
NOISE EL =	0.0	-	ī	OISE HTH	IL=	14.0	
DROP-OFF=	20.0	(20 = 6)		DOUBLING C		CE)	
	20.0	(20 - 0					
COFF			MOTER LE	VELS (dBA)			
_		CDITT		L2	ΓB	L25	L50
	IST (FT)	CNEL	Lmax				
		= C = E					
REF LEVEL	10	79.7		-5.6	-5.6	-5.6	-5.6
PROJ LEVE		74.1	-5.6		-14.2	-14.2	
SHIELDING	19	-14.2	-14.2	-14.2	- -	-19.8	
דרות דידעדי.	19	59.9	-19.8	-19.8	-19.8_	-19.0	-19.0

PROJECT: SOURCE: LOCATION:	Radio Sq Save-On	ware HVAC Noise or - Unit	= 307			JOB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa	
HOCKITOIN						*		
OBS DIST=	25.0		,					
DT WALL=	1.0							
DT W/OB=	24.0							
HTH WALL=	0.0	*****						
BARRIER =	0.0	(0=WALL,1=	=BERM)					
OBS HTH=	31.0			- ADDIED I				
NOISE HTH=	14.0			BARRIER+ TOPO SHIE	IDING =	0.00		
OBS EL =	0.0			NOISE HTH		14.0		
NOISE EL =	0.0		1-2 DTT	DOUBLING	OF DISTAN	ICE)		
DROP-OFF=	20.0	(20 = 6)	GRA PER	DOODTING	01 2222			
COFF			MOTER T.	EVELS (db.	7)			
		CTATE	Lmax	L2	_, 	L25_	L50	
	DIST (FT)	CNEL	Tillar				·	
	10	79.7				•	_	•,,
REF LEVEL			-8.0	-8.0	-8.0	8.0	_	.0.:
PROJ LEVE	. 25 25	_	0.0	0.0	0.0	0.0	_	0.
SHIELDING ADJ LEVEL		_	-8.0	-8.0	-8.0	-8.0	-8	<u></u>
ADJ LEVEL								

PROJECT:	Radio So	nare				JOB #:		-06-08
SOURCE:		HVAC Noise	e			DATE:	31-Aı	
LOCATION:	3rd Floo	or - Unit	307 w/wa		3Y:	Mike	Rosa	
	· · · · · · · · · · · · · · · · · · ·		 -					
OBS DIST=	25.0							
DT WALL=	1.0							
DT W/OB=	24.0							
HTH WALL=	24.0	*****						
BARRIER =	0.0	(0=WALL,l=	=BERM)	,				
OBS HTH=	31.0				•			
NOISE HTH=	14.0			BARRIER+		# 4 00		
OBS EL =	0.0			TOPO SHIELI		-14.90		
NOISE EL =	0.0			NOISE HTH 1		14.0		
DROP-OFF=	20.0	(20 = 6)	dba per	DOUBLING C	F DISTANC	CE)		
COFF								
			NOISE L	EVELS (dBA)				
I	DIST (FT)	CNEL	Lmax	<u>L2</u>	<u> </u>	L25		L50
REF LEVEL	10	79.7						ь ^
PROJ LEVE	L 25	71.7	-8.0	-8.0	-8.0	-B.O		-8.0
SHIELDING	25	-14.9	-14.9	-14.9	-14.9	-14.9		-14.9
ADJ LEVEL	25	56.8	-22.9	-22.9	-22.9	-22.9		-22.9

PROJECT:	Radio Sq	uare HVAC Noise			;	JOB #: DATE:	1512-0 31-Aug Mike R	-06	
LOCATION:	4th Floo	r - Unit 4	102			BY:	MINC 10		-
OBS DIST= DT WALL= DT W/OB= HTH WALL= BARRIER = OBS HTH= NOISE HTH= OBS EL = NOISE EL = DROP-OFF=	B5.0 1.0 84.0 0.0 0.0 42.0 14.0 0.0 0.0	******** (0=WAI:L,1=		BARRIER+ TOPO SHIEI NOISE HTH R DOUBLING	EL=	0.00 14.0 (CE)			
	DIST (FT)	CNEL	NOISE I	EVELS (dBA	PB)	L25	I	<u> </u>	<u> </u>
REF LEVEL PROJ LEVE SHIELDING ADJ LEVEL	L 85	61.1	-18.6 0.0 -18.6	-18.6 0.0 -18.6	-18.6 0.0 -18.6	-18.6 0.0 <u>-18.6</u>)	-18.6 0.0 -18.6	כ

PROJECT:	Radio So	_	_			JOB #: DATE:	1512-06-08 31-Aug-06
SOURCE:		HVAC Nois		17 0 1777 0		BY:	Mike Rosa
LOCATION:	4th Floo	or - Unit	402 w/wa.	LI @ HVAC		BI:	MINE KOBE
OBS DIST=	85.0						1
DT WALL=	1.0						
DT W/OB=	84.0						
HTH WALL=	24.0	*****					•
BARRIER =	0.0	(0=WALL,1:	=BERM)				
OBS HTH=	42.0						
NOISE HTH=	14.0			BARRIER+			
OBS EL =	0.0		,	TOPO SHIEL	DING =	-15.70	•
NOISE EL =	0.0		1	NOISE HTH	EL≔	14.0	
DROP-OFF=	20.0	(20 = 6)	dba per	DOUBLING (OF DISTAN	CE)	
COFF		,					
			NOISE LE	vels (dba)			
T	IST (FT)	CNEL	Lmax	L2	L8	L25	<u>L50</u>
REF LEVEL	10	79.7					
PROJ LEVEJ	ւ 85	61.1	-18.6	-18.6	-18.6	-18.6	-18.6
SHIELDING	85	-15.7	-15.7	-15.7	-15.7	-15.7	-15.
ADT LEVEL	85	45.4	-34.3	-34.3	-34.3	-34.3	-34.3

PROJECT: SOURCE: LOCATION:		uare HVAC Noise r - Unit			I	OB #: DATE: BY:	1512-06 31-Aug- Mike Ro	06
OBS DIST= DT WALL= DT W/OB= HTH WALL= BARRIER = OBS HTH= NOISE HTH= OBS EL = NOISE EL = DROP-OFF= COFF	48.0 1.0 47.0 0.0 0.0 42.0 14.0 0.0 0.0 20.0	******** (0=WALL, 1= (20 = 6	dBA PER	BARRIER+ TOPO SHIEL NOISE HTH DOUBLING VELS (dBA)	EL= OF DISTAN(0.00 14.0 CE)		50
REF LEVEL PROJ LEVE SHIELDING ADJ LEVEL	L 48 48	79.7 66.1 0.0 66.1	-13.6 0.0 -13.6	-13.6 0.0 -13.6	-13.6 0.0 -13.6	-13.6 0.0 -13.6))	-13.6 0.0 -13.6

PROJECT: SOURCE: LOCATION:		quare HVAC Noise or - Unit		l @ HVAC		JOB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa
OBS DIST= DT WALL= DT W/OB= HTH WALL= BARRIER = OBS HTH= NOISE HTH= OBS EL = NOISE EL = DROP-OFF= COFF	48.0 1.0 47.0 24.0 0.0 42.0 14.0 0.0 0.0 20.0	******* (0=WALL,1=) (BARRIER+ 10PO SHIEI NOISE HTH DOUBLING		-14.90 14.0	
COFF			NOISE LE	VELS (dba			T.F.O.
I	DIST (FT)	CNEL	Lmax	L2	ΤB	L25	<u>L50</u>
REF LEVEL PROJ LEVE SHIELDING ADJ LEVEL	L 48	66.1 -14.9	-13.6 -14.9 -28.5	-13.6 -14.9 -28.5	-13.6 -14.9 -28.5	-13.6 -14.9 -28.5	-13.6 -14.9 -28.5

Barrier at Combination of HVAC Unit and Balcony

	•				
	•	,			
				•	
			·		
	,				
•					
			•		
			*		•
					•
	•	•		•	

PROJECT:	Radio Sq Save-On	HVAC Noise				JOB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa
LOCATION:	1st Floo	r - Unit 1	04 w/wa.i	LI @ HVAC		<u> </u>	
OBS DIST= DT WALL= DT W/OB= HTH WALL= BARRIER = OBS HTH= NOISE HTH= OBS EL = NOISE EL = DROP-OFF=	0.0	******* (0=WALL,1=	1	BARRIER+ TOPO SHIEL NOISE HTH DOUBLING (EL=	-14.40 14.0 NCE)	
COFF	DIST (FT)	CNEL	NOISE LE	VELS (dBA)	L8	L25_	L50
REF LEVEL PROJ LEVE SHIELDING ADJ LEVEL	, 10 IL 89	79.7 60.7 -14.4	-19.0 -14.4 -33.4	-19.0 -14.4 -33.4	-19.0 -14.4 -33.4	-19.0 -14.4 -33.4	-14.4

6.5 'l HVAC 0' e balcom

PROJECT:	Radio So	nuare				JOB #:	1512-06-08 31-Aug-06
SOURCE:		HVAC Noise				DATE:	_
LOCATION:	2nd Floo	or - Unit :	204 w/wal	l @ HVAC		BY:	Mike Rosa
		·					
OBS DIST=	51.0						
DT WALL=	1.0						
DT W/OB=	50.0						
HTH WALL=	18.5	*****					
BARRIER =	0.0	(0=WALL,1=	=BERM)				
OBS HTH=	20.0			•			
NOISE HTH=	14.0		_	BARRIER+			
OBS EL =	0.0			COPO SHIELI		-13.70	•
NOISE EL =	0.0			OISE HTH		14.0	
DROP-OFF=	20.0	(20 = 6)	dba per	DOUBLING C	OF DISTAN	CE)	
COFF							
			NOISE LE	VELS (dBA)			
I	DIST (FT)	CNEL	Lmax	L2	L8	L25	L50
	<u>.</u>						
REF LEVEL	10	79.7				- 4 -	7.4.0
PROJ LEVE	L 51	65.5	-14.2	-14.2	-14.2	-14.2	-14.2
SHIELDING	51	-13.7	-13.7	-13.7	-13.7	-13.7	·
ADJ LEVEL	51	51.8	-27.9	-27.9	-27.9	-27.9	-27.9

6.5' @ HVAC O' e bellong

PROJECT: SOURCE:	Radio Squ Save-On I	AVAC Noise		l a combo	I	JOB #: DATE: BY:	1512-06-0 31-Aug-06 Mike Rosa	
LOCATION:	2nd Floo:	r - Unit 1	.USR W/Wa	ll @ combo				
OBS DIST= DT WALL= DT W/OB= HTH WALL= BARRIER = OBS HTH= NOISE HTH= OBS EL = NOISE EL = DROP-OFF=	5.0 14.0 15.0 0.0	******* (0=WALL,1= (20 = 6	B T N	ARRIER+ OPO SHIELI OISE HTH 1 DOUBLING (EL=	-9.30 14.0 CE)		
COFF	DIST (FT)	CNEL	NOISE LE Lmax	VELS (dBA)	L8	L25	1.50	_
REF LEVEL PROJ LEVE SHIELDING	L 21 21	60.1 60.1 -9.3 50.8	0.0 -9.3 -9.3	0.0 -9.3 -9.3	0.0 -9.3 -9.3	0.0 -9.3 -9.3	· -	0.0 9.3 9.3

6.5 e AVAC 6.0 e balcony

PROJECT:	Radio So	quare		·		OB #:	1512-06-08
SOURCE:		HVAC Nois				DATE:	31-Aug-06
LOCATION:	2nd Floo	or - Unit	105R w/wa	ll @ HVAC	F	3Y:	Mike Rosa
OBS DIST≔	21.0						
DT WALL=	1.0						
DT W/OB=	20.0						
HTH WALL=	18.5	*****		•			
BARRIER =	0.0	(0=WALL, 1:	=BERM)				
OBS HTH=	20.0						
NOISE HTH=	14.0		I	BARRIER+			
OBS EL =	0.0		7	ropo shieli	DING =	-13.20	
NOISE EL =	0.0			NOISE HTH		14.0	
DROP-OFF=	20.0	(20 = 6)	dba per	DOUBLING (OF DISTANC	E)	
COFF		•					
J			NOISE LE	VELS (dBA)	•		
ם	IST (FT)	CNEL	Lmax	L2	L8	L25	L50
			•				
REF LEVEL	10			<i>c</i>	-6.4	-6.4	-6.4
PROJ LEVE			-6.4	-6.4		-13.2	-13.2
SHIELDING	21		-13.2	-13.2	-13.2		-19.6
ADJ LEVEL	21	60.1	-19.6	-19.6	-19.6	-19.6	-19.6

PROJECT: SOURCE:	Radio Sq Save-On	HVAC Noise	ozr w/wa	ll @ combo	I	JOB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa	_
LOCATION:	2110 F100	T - OHTE -	0 120 17					
OBS DIST= DT WALL= DT W/OB= HTH WALL= BARRIER =	19.0 14.0 5.0 6.0	******* (O=WALL,1=	BERM)				: .	
OBS HTH= NOISE HTH= OBS EL = NOISE EL = DROP-OFF=	5.0 14.0 15.0 0.0 20.0	(20 = 6	<u>;</u>	BARRIER+ TOPO SHIELI NOISE HTH I DOUBLING (ZL=	-9.60 14.0 CE)		. *
COFF	DIST (FT)	CNEL	NOISE LE	VELS (dBA)	L8	L25_	L50	
REF LEVEL PROJ LEVE SHIELDING ADJ LEVEL	. 19 IL 19 19	61.0 61.0 -9.6 51.4	0.0 -9.6 -9.6	0.0 -9.6 -9.6	0.0 -9.6 -9.6	0.0 -9.6 -9.6	-9.	

Co.5' @ HVAC

SOURCE: Sav	lio Square re-On HVAC Nois I Floor - Unit	e 107D w/wal	ר איז אר		JOB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa
LOCATION: 2nd	Floor - Unit	IU/R W/WAI	1 6 111110			
	.9.0 1.0					
DT W/OB= 1	_B.O					
•	18.5 ******					
==::	0.0 (0=WALL,1	=BERM)		•		
	20.0				•	
	L4.0		RRIER+			
	0.0	TC	PO SHIELD	ING =	-13.10	
	0.0	NC	DISE HTH E		14.0	
		dba per D	OUBLING O	F DISTAN	CE)	
COFF			a.			
4		NOISE LEV	ELS (dBA)			
DIST	(FT) CNEL	Lmax	L2	L8	L25	L50
		· · · · · · · · · · · · · · · · · · ·				
REF LEVEL	10 79.7					
PROJ LEVEL	19 74.1	-5.6	-5.6	-5.6	-5.6	-5.6
SHIELDING	19 -13.1	-13.1	-13.1	-13.1	-13.1	-13.1
ADJ LEVEL	19 61.0	-18.7	-18.7	-18.7	-18.7	-18.7

PROJECT: SOURCE:	Radio Sq Save-On	puare HVAC Noise or - Unit 1	e	l @ HVAC		JOB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa	
LOCATION:	3rd Floo	r - Unit	04 W/ Wala					
OBS DIST= DT WALL= DT W/OB= HTH WALL= BARRIER = OBS HTH= NOISE HTH= OBS EL = NOISE EL = DROP-OFF=	85.0 1.0 84.0 18.5 0.0 31.0 14.0 0.0 0.0	******* (0=WALL, l=] :	BARRIER+ FOPO SHIEL NOISE HTH DOUBLING (EL=	-13.20 14.0 ICE)		
	DIST (FT)	CNEL 79.7	NOISE LE Lmax	VELS (dBA)	L8	L25_	L50	_
REF LEVEL PROJ LEVE SHIELDING	L 85	61.1 -13.2	-18.6 -13.2 -31.8	-18.6 -13.2 -31.8	-18.6 -13.2 -31.8	-18.6 -13.2 <u>-31.8</u>	-13.2	

6.5' @ HVAC

O. e balcony

PROJECT:	Radio So	uare				OB #:	1512-06-08
SOURCE:		HVAC Noise	3	*	D	ATE:	31-Aug-06
LOCATION:	3rd Floo	or - Unit 3	305 (w/wa	ill @ combo	o) B	Y:	Mike Rosa
OBS DIST=	19.0						
DT WALL=	14.0						
DT W/OB=	5.0						
HTH WALL=	4.0	******					
BARRIER =	0.0	(O=WALL, 1=	BERM)				
OBS HTH=	5.0						
NOISE HTH=	14.0		-	BARRIER+			
OBS EL =	26.0			COPO SHIEL		-9.70	
NOISE EL =	0.0			NOISE HTH		14.0	
DROP-OFF=	20.0	(20 = 6)	dba per	DOUBLING (OF DISTANC	E)	
COFF							•
4011			NOISE LE	VELS (dbA)		•	
I	DIST (FT)	CNEL	Lmax	L2	T8	L25	<u>L50</u>
				 -			
REF LEVEL	19	63.9					0.0
PROJ LEVE	L 19	63.9	0.0	0.0	0.0	0.0	0.0
SHIELDING	19	-9.7	-9.7	-9.7	-9.7	-9.7	
ADJ LEVEL	19	54.2	-9.7	-9.7	<u>-9.7</u>	-9.7	-9.7

4.0' c balcom

PROJECT: Radio Square SOURCE: Save-On HVAC Noise LOCATION: 3rd Floor - Unit 305 w/wall @ HVAC OBS DIST= 19.0 DT WALL= 1.0 DT W/OB= 18.0 HTH WALL= 18.5 ********	
LOCATION: 3rd Floor - Unit 305 w/wall @ HVAC BI: MALLE DISTE 19.0 DT WALLE 1.0 DT W/OB= 18.0 HTH WALLE 18.5 *******	sa
DT WALL= 1.0 DT W/OB= 18.0 HTH WALL= 18.5 *******	
DT WALL= 1.0 DT W/OB= 18.0 HTH WALL= 18.5 *******	
DT W/OB= 18.0 HTH WALL= 18.5 *******	
HTH WALL= 18.5 ******	
UIU MATITI- 70:0	
BARRIER = 0.0 (0=WALL, 1=BERM)	
ORS HTH= 31.0	
NOTER HTH= 14.0 BARRIER+	
OPS PT 0.0 TOPO SHIELDING = -10.20	
NOISE EL = 0.0 NOISE HTH EL=	
DROP-OFF= 20.0 (20 = 6 dBA PER DOUBLING OF DISTANCE)	
COFF NOISE LEVELS (dBA)	_
DIST (FT) CNEL Lmax L2 L8 L25 L5	50
DISI (FI) CHDE	
REF LEVEL 10 79.7	
74.1 -5.6 -5.6 -5.6 -5.6	-5.6
PROU HEVEL 19 -10.2 -10.2 -10.2 -10.2	-10.2
SHIELDING 19 -10.2	-15.8

PROJECT:	Radio So	nare				OB #:	1512-06-08
SOURCE:	Save-On	HVAC Noise	:			ATE:	31-Aug-06
LOCATION:	3rd Floo	or - Unit 3	07 w/wal	.1 @ combo	E	Y:	Mike Rosa
					•		
OBS DIST=	25.0	•					
DT WALL=	20.0						
DT W/OB=	5.0						
HTH WALL=	4.0	*****					
BARRIER =	0.0	(0=WALL,1=	BERM)				•
OBS HTH=	5.0						
NOISE HTH=	14.0			BARRIER+			,
OBS EL =	26.0			COPO SHIELI		-8.30	
NOISE EL =	0.0			NOISE HTH I		14.0	
DROP-OFF=	20.0	(20 = 6)	dba per	DOUBLING C	F DISTANC	(E)	
COFF							
			NOISE LE	VELS (dBA)			TEO
I	DIST (FT)	CNEL	Lmax	<u>L2</u>	T-B	L25	L50
REF LEVEL	25	62.2					0.0
PROJ LEVE	L 25	62.2	0.0	0.0	0.0	0.0	-8.3
SHIELDING	25	-8.3	-8.3	-8.3	-8.3	-8.3	-8.3
ADJ LEVEL	25	53.9	-8.3	-8.3	-8.3	-8.3	-0.3

4.0° e HVAe 4.0° e balcom

PROJECT: SOURCE:	Radio Sq Save-On	uare HVAC Noise r - Unit 3	e kn7 w/wal	l @ HVAC	:	JOB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa
LOCATION:	310 1100	T - Ulite	,0,,				
OBS DIST= DT WALL= DT W/OB= HTH WALL= BARRIER = OBS HTH= NOISE HTH= OBS EL = NOISE EL = DROP-OFF=	25.0 1.0 24.0 18.5 0.0 31.0 14.0 0.0 0.0	******** (0=WALL,1= (20 = 6] 5	BARRIER+ IOPO SHIELI NOISE HTH I DOUBLING C		-11.20 14.0 CE)	
COFF			NOISE LE	VELS (dba)		- 0 -	L50
Т	DIST (FT)	CNEL	Lmax	L2	<u> </u>	L25	
REF LEVEL PROJ LEVE SHIELDING ADJ LEVEL	10 L 25 25	71.7 -11.2	-8.0 -11.2 -19.2	-8.0 -11.2 -19.2	-8.0 -11.2 -19.2	-8.0 -11.2 -19.2	-11.2

PROJECT:	Radio So	_{luare}				TOB #:	1512-06-08
SOURCE:		HVAC Nois				DATE:	31-Aug-06
LOCATION:	4th Floo	or - Unit	402 w/wal	l @ HVAC]	3Y:	Mike Rosa
		-					
OBS DIST=	85.0						
DT WALL=	1.0			•			
DT W/OB=	84.0						
HTH WALL=	18.5	*****					
BARRIER =	0.0	(0=WALL, 1:	=BERM)				
OBS HTH=	42.0						
NOISE HTH=	14.0		_	BARRIER+			
OBS EL =	0.0			TOPO SHIEL		-12.60	
NOISE EL =	0.0		1	NOISE HTH		14.0	
DROP-OFF=	20.0	(20 = 6)	dba per	DOUBLING (OF DISTANC	CE)	,
COFF			•				
			NOISE LE	VELS (dBA)			
I	DIST (FT)	CNEL	Lmax	L2	L8	L25	L50
REF LEVEL	10	79.7			•	_	
PROJ LEVE	L 85	61. 1	-18.6	-18.6	-18.6	-18.6	-18.6
SHIELDING	85	-12.6	-12.6	-12.6	-12.6	-12.6	-12.6
ADJ LEVEL	85	48.5	-31.2	-31.2	-31.2	-31.2	-31.2

6.5 Delcom

PROJECT: SOURCE:	Radio Sq Save-On	ware HVAC Noise or - Unit '	3 w/wal	l @ HVAC		JOB #: DATE: BY:	1512-06-08 31-Aug-06 Mike Rosa
LOCATION:	4th Floo	E - OHIC.	EU3 W/ Was				
OBS DIST= DT WALL= DT W/OB= HTH WALL= BARRIER = OBS HTH= NOISE HTH= OBS EL = NOISE EL =	48.0 1.0 47.0 18.5 0.0 42.0 14.0 0.0	******* (O=WALL,1=	:	BARRIER+ TOPO SHIELI NOISE HTH	EL=	-11.40 14.0	
DROP-OFF=	20.0	(20 = 6)	dba per	DOUBLING (NE DIGIEN	(max	•
COFF	DIST (FT)	CNEL	NOISE LE	VELS (dBA)	L8	L25	L50
REF LEVEL PROJ LEVE SHIELDING	10 L 48 48	79.7 66.1	-13.6 -11.4 -25.0	-13.6 -11.4 -25.0	-13.6 -11.4 -25.0	-13.6 -11.4 -25.0	-13.6 -11.4 -25.0

6.5' @ HURC 0.' @ balcony

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Distance Conversion Calculations

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•		
	•	

NOISE LEVEL ADDITION (dBA) Ralph's Louvers + Truck Delivery

Unmitigated[®]

		1 (177.4)		10^dBA/10
Street Name	Nois	e Level (dBA)		3,162,277.7
De La Vina		65.0		794,328.2
Ralph's louvers+Tr	uck Del.	59.0		
KGT DIL B TOMOTO				
				3,956,605.9
· Combined Noise Lev	el (dBA) =	66.0		

	Total Con	nbined Noise Impact	s to
Unmitigated	N/A	N/A	N/A
66.0	N/A	N/A	N/A

CNEL CALCULATED FROM SITE MEASUREMENTS

	Radio Square Santa Barba: HVAC unit on Sav-On roof		Review		ATE: N:	11-Aug-06 1512-06-08
TIME	HOURLY		HOURLY LEQ	 A	DJUSTEI)
BEGINNING	LEQ		WEIGHTING		URLY LE	EQ .
0000	73.0	*	10.0		83.0	
0100	73.0		10.0		83.0	
0200	73.0		10.0		83.0	
0300	73.0		10.0		83.0	
0400	73.0		10.0		83.0	
0500	73.0		10.0		83.0	
0600	73.0		10.0		83.0	
0700	73.0		0.0		73.0	
0800	73.0		0.0		73.0	
0900	73.0		0.0		73.0	
1000	73.0		0.0		73.0	
. 1100	73.0		0.0		73.0	
1200	73.0		0.0		73.0	
1300	73.0		0.0		73.0	
1400	73.0		0.0		73.0	
1500	73.0		0.0		73.0	
1600	73.0		0.0		73.0	
1700	73.0		0.0		73.0	
1800	73.0		0.0		73.0	
1900	73.0		5.0		78.0	
2000	73.0		5.0		78.0	
2100	73.0		5.0		78.0	
2200	73.0		10.0		83.0	
2300	73.0		10.0		83.0	
					779W)	CNEL (dBA)
ir. Measur Measured I					b	
	·			Mor	st c	ise hs
					1 2	
	· .		r	at.	24 I	result
				opera	+ or	` .

TABLE II EXISTING AMBIENT NOISE LEVELS

Monitoring Site ¹	Monitored Leq (dBA)	Ldn / CNEL @ Project Property Line	Major Noise Source
Carrillo Street	67 dBA	68 Ldn	Vehicle noise from Carrillo Street
De La Vina	65 dBA	66 Ldn	Vehicle noise from De La Vina
Street	05 0511		Street
De La Vina	59 dBA	66 CNEL	Mechanical louvers in the building façade of the Ralph's
Street			Grocery store
Alley, West of	70 to 184	77 to 80 CNEL	Rooftop unit at the Savon's Drug
Site	dBA		store

All measurements were taken at on near the project's site property line.

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